THE

Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

VOL. IV. CHICAGO, FEBRUARY 7, 1885. No. 6.

ORIGINAL ARTICLES.

THE WORTHLESSNESS OF INHALERS AND INSUFFLATORS IN THE TREATMENT OF CHRONIC NASAL CATARRH.

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Almost every work that has been published within the last five years on diseases of the nasal passages and throat contains full directions for using these methods. Inasmuch as I know, from experience, that both of them are not only worthless but injurious, I will analyze the subject sufficiently to demonstrate their inefficiency, and show that they must do harm in every instance, even if the agents used are the very best that could be selected, proving conclusively that the failure to benefit the patient is due wholly to the fact that the methods themselves are defective. I will go farther; I will give my experience to prove that the agents usually employed are deceptive, and are always injurious.

In the early part of 1868 I saw, in Cohen's work on inhalations (1867), a lucid description of Lewin's (Berlin) method of making and applying nascent muriate of ammonia. This method of applying this salt to the diseased mucous membrane appeared so scientific, and was so highly recommended, that I got an elaborate apparatus prepared, and employed it for nearly one year on a large number of patients, consequently my knowledge of its effects is not merely theoretical but experimental.

As this method is again being revived, I will quote Cohen's description of Lewin's apparatus, to show that what I used in 1868 and what is now being used are one and the same:

"This apparatus [fully illustrated on page 251] consists of a series of three Wolfe's bottles. One of these contains liq. ammoniæ caustici, another pure muriatic acid, and the third bottle, which is filled with water, receives a tube from each of the other bottles, these tubes reaching to the bottom of the water; while from a third opening in the cork the vapor extrudes through an exit tube, to which a mouthpiece is attached by India rubber tubing. Now, as the effort of inspiration draws the liquids [vapors] from the first two bottles into the third bottle, their ingredients combine to form the sal-ammoniac vapor, which, during its passage through the water, becomes cleansed of impurities. If it is desired to medicate the nascent sal ammoniac with creosote, or an oleo-balsamic mixture, or bitter almond water, etc., all that will be necessary will be to add it to the water in the third bottle."

I followed these directions to the letter. In the third bottle—that is, the one from which the patient inhaled the nascent muriate of ammonia—I put the "oleo-balsamic mixture, bitter almond water, etc." The "etc." consisted of almost everything that would evaporate and not do harm; but the three agents from which I received the most benefit, or rather that made the patients think they were receiving the most benefit, were carbolic acid, cubebs, and sassafras bark, named in the order in which they gave the most satisfaction.

I found in a month or two that the patients were under the influence of a continuous cold in the head, a symptom that many of them had not before experienced. I then gave the inhalations but once a week, and in the interim I applied, by means of such spray producers as would treat the pharyngo-nasal and nasal cavities, about one-half dram of the following mixture: Saturated solution of muriate of ammonia, tincture of iodine, tincture of aconite leaves, of each ʒj, and water ʒviij. Gradually I lengthened the interval of the inhalations, until I stopped them altogether at the end of the year 1868.

The first few times that these inhalations were used the patients were greatly pleased with them, but the pleasant effects soon faded into unpleasant effects, which, with the increase of symptoms of acute inflammation, proved to me that the method was an injurious one.

The Kirkwood and Crosby inhalers, and the one now popular in London (I have forgotten the name of the claimant of this one), and recommended by an ear surgeon of that city of some note, are apparatuses for the formation of nascent muriate of ammonia, and are precisely alike in principle to the one used by Lewin, in 1862. The London apparatus is so constructed that one bottle is all that is required. Through the cork of the bottle are passed two tubes. One is made Y-shaped, the lower portion of which passes through the cork and to the bottom of the liquid in the bottle. In one of the projecting arms of this Y-shaped tube is placed a small sponge, on which is poured muriatic acid; into the other arm another small sponge, on which is poured aqua ammonia. The other tube that passes through the cork is used by the patient for inhaling the vapor from the bottle.

Each one of the inventors (?) has placed in the

fluid that is in his bottle some agent that is apparently intended to enhance the value of the muriate of ammonia, such as carbolic acid, cubebs, camphor, tincture of iodine, chloroform, and such like.

The strength of the carbolic acid is always sufficient to produce an anæsthetic effect; anything short of this would not serve their purpose, which is to have their purchasers experience a relief of any pain that their catarrh might cause; but whenever this anæsthetic effect is produced, it *always increases* the existing congestion of the mucous membrane. I am very certain that I am right in making this assertion. Not only does the carbolic acid increase congestion, but if any irritating agent is also put into the inhaler, as the tincture of iodine, the patient is not warned of the injury done by it, as the pain is covered by the anæsthetic property of the acid. In some of these apparatuses chloroform also forms a part of the liquid; this agent will certainly cover all irritation produced by the tincture of iodine. That this latter agent is always injurious may easily be proved by the reader inhaling it alone, the immediate increase in the flow of mucus makes irritation apparent.

Only those who have applied cubebs and camphor to their own nostrils know how liable both of these agents are to render the mucous membrane subject to colds. Hot water baths are not more liable to induce colds than cubebs and camphor. If they are to be used, I would advise the physician (especially if he has the least nasal catarrh — for they will not have a very bad effect on a healthy person), to use them on himself first.

Insufflators are far more popular than inhalers. I presume that the reason for this is that a powder from the former instrument remains much longer on the mucous membrane than a vapor, consequently they may think that applications by an insufflator will have a more permanent curative effect.

All the agents named, except chloroform, the least objectionable one, are also used in the insufflator. In fact, they are the principal agents, and upon them the authors of our latest works on diseases of the nasal passages depend for the cure of chronic inflammation.

If these are taken away, their books would be stripped of remedies that give as much, if not more, promise than all other agents that they recommend.

It is admitted that vapors from an inhaler, and powders from tubes called insufflators, can be made to pass through the nasal cavities; not only this, but they can be thrown upon every portion of the nasal surfaces. But experience has proven time and again that they have not cured chronic catarrhal inflammation. Why is it that these methods do not cure?

Some one may say, "If every portion of those irregular cavities is reached, the failure must be due to the fact that the wrong agents are employed." Unfortunately this is not a satisfactory explanation of the failure, because every article of the materia medica that could be used and would not produce positive injury, has been applied by one or both of these methods, and with the same general result — a complete failure.

It seems to me that this indicates that the objects to be attained and the means of attaining them are not understood; or to use other words, that what is to be done to treat nasal catarrh successfully, and how to do it, are unknown. A proper understanding of these two paramount subjects is, I think, the solution of the whole difficulty.

I will endeavor to answer the question: What should these two methods do to assist the healing tendency of nature to perform a cure?

Every one familiar with the appearance of a chronically inflamed mucous membrane, knows that it is usually coated with a thick tenacious secretion, and in the worst cases this muco-pus sometimes forms crusts. Many years of experience has proven most conclusively that success in treatment will depend on the removal, by mild means, of this closely adhering coating, which, besides being a constant cause of irritation to the membrane covered by it, is a source of very much annoyance, and frequently of great pain, and it prevents the medicament from reaching the diseased surface, a most important matter, as every one will perceive after a moment's reflection.

It is self-evident that the inhalation of a vapor, either cold or warm, or the insufflation of a powder, can have no cleansing effect on a surface that is even but slightly affected by catarrhal inflammation, and as to its cleansing surfaces covered by secretions, some of which adhere so tenaciously that they can scarcely be removed by a brush, cannot be thought of for a moment, yet this is just what is expected of them, what they should do and what they *must do*, if the case is to recover by the aid of this kind of treatment.

I venture to say that it is now not difficult to understand why the inhalation and insufflation methods of treatment always fail.

Besides this palpable oversight, there is another nearly as great; it is this: In the immediate neighborhood of the inflamed parts, there is quite an extensive surface of healthy mucous membrane. This normal membrane is constantly moistened with a VERY THIN coat of healthy mucus, which is watery in its consistency. I have not emphasized the words "very thin," accidentally, but to indicate the extreme attenuation of mucus on a healthy mucous membrane. Chemico-physiologists have been unable to ascertain the exact chemical composition of healthy mucus, for the simple reason that it was impossible to collect a sufficient quantity to analyze it, proving, conclusively, that the quantity on the healthy membrane is only sufficient to moisten it; not the least redundancy is to be found on its surface.

A vapor from the inhaler or a powder from the insufflator instantly affects the healthy mucous membrane through this attenuated coating of healthy mucus, but I deny that we have any evidence that even a pungent vapor, or a sharp powder, will as quickly pass through so much as a thin coating of secretion that flows from a catarrhal surface, and as to a powder passing through a thick, viscid muco-pus (for a vapor cannot do it) I know, from observation, that hours and days are required. The rain falls upon the just and the unjust, so, with like impartiality, does the vapor or powder light upon the healthy and unhealthy mucous membrane, but their effects upon these

two different surfaces stand in marked contrast to each other.

A vapor or a powder can produce no effect in the nasal cavities unless it reaches the mucous membrane by being first formed into a solution by the mucus that is on the surface to be treated. Surfaces covered by crusts are of course not affected in the least by either agent, yet this very surface is more in need of treatment than any other. If a membrane, covered by a semi-fluid, tenacious muco-pus is to be treated, it can only be done by the vapor or powder being formed into a solution by this thick secretion. It is safe for me to say that no vapor, however pungent, penetrates this muco-pus, and it is also safe to say that a powder may remain on it for several days without affecting the membrane covered by it. Can it be said that this exemption from the effects of a vapor or powder is extended to the healthy mucous membrane? No, indeed! The healthy mucus instantly forms a solution of both, so that the healthy membrane is as instantly injured by it. I presume no one will say that a healthy mucous membrane may have a medicated vapor or powder applied to it repeatedly without injuring it.

"But," says a friend of the inhaler and insufflator, "I have seen crusts as well as semi-fluid secretion removed by both of these methods. How do you account for it?" In this way: The vapor and the powder always acts as an irritant to the healthy mucous membrane, as has been said, and, in the instances where these accumulations were removed, the irritation must have been of such an aggravated character, as to be sufficient to excite an unusual flow of mucus from the *whole* surface of the nasal cavity; that is, the mucus is caused to be poured out from that portion of the membrane that is covered by the crusts and semi-fluid secretion, as well as from the healthy uncovered membrane, and this unusual, forced outflow of mucus washes away a part of the adhering muco-purulent collection. That I am right in this, is proved by the fact that these solid and semi-solid accumulations come away long before a powder could have passed through them to have such an effect on the membrane to which they adhered. This is evident. Again a vapor, an agent that no one will say can pass through these secretions, will in precisely the same way and in the same time remove these accumulations.

There are two important questions to be asked.

1st. Has a diseased surface, that has been treated by the inhaler or insufflator, been benefited or irritated by these methods?

A surface thus covered could derive no benefit from a vapor passing over it, the duration of the passage being too short; even a powder would not remain there long enough to become a solution of sufficient strength to excite a flow of mucus to wash off the coating, because the portion of the powder that fell on the healthy mucous membrane would cause enough irritation to wash everything out of the cavity. Consequently the answer must be that the diseased surface was irritated only, not by the medicament applied to it, for that could not reach it, but that applied to the healthy mucous membrane in its immediate neighborhood.

2d. Has the healthy mucous membrane been benefited or irritated?

I should like to know which horn of the dilemma the advocates of inhalations and insufflations would take? For either will injure their cause. They do not wish to be understood as making applications to a healthy surface for the purpose of improving it. They can only say that they unavoidably irritate the healthy surface, while irrigating the diseased membrane sufficiently strong to compel an unusual flow of mucus to wash away an offending secretion.

"But," says one, "I deny that there is any healthy mucous membrane in a catarrhal nasal cavity." Will he, in this way, get rid of these two barriers (questions) to these methods? No, indeed! Even if his knowledge of the condition of a catarrhal nasal cavity is limited, which this denial would indicate, he must admit that there are portions of a catarrhal cavity that are far more inflamed than others; that is, there are portions that are not covered by semi-fluid and solid secretions. This being the case, as all know, then let him answer the questions as to the treatment of the less, and the more inflamed parts, by a method that treats the covered portions by irritating the uncovered portions.

It is seen that the surface that does not require treatment receives it, and that which does require treatment does not receive it. Irritating a healthy membrane for the purpose of influencing a diseased membrane, cannot be called treatment of a diseased membrane. These methods irritate the healthy surface to free the unhealthy surface of its diseased secretion; the injury done to the one is much greater than the benefit to the other, for a healthy membrane, will take on an inflamed condition very much faster than a diseased surface will resume its normal condition.

Some one may suggest that if the catarrhal secretion be first removed, might not a vapor and powder have a beneficial effect?

No, of course not! I have already given my experience to prove that the vapors and powders mentioned in this paper (and they are the most popular), are harmful in whatever way they are applied.

The consideration of vapors is dismissed by saying that they are too transient to be beneficial.

It is impossible to apply a powder to a diseased surface alone, and the healthy surface will be injured by a medicated powder. Even the mildest kind of a powder will cause irritation of a healthy membrane by drying its surface, which is not its normal condition, this condition being that of perpetual moisture. In this case, also, the injury done to the healthy surface by the medicated powder is greater than the benefit to be derived from its application to the cleansed diseased surface.

If a patient's nasal passages are cleansed first, and a powder applied next, the case will be over-treated. Those who have had much to do with these cases, know how easy it is to over-treat them. If the patient is made to wait long enough for the membrane to recover from the partial injury done by the cleans-

ing process, as water cannot be applied to the nasal mucous membrane without injuring it to some extent, the surface will be again coated with secretion before the powder is applied, in which case the patient will not be properly treated.

That physician is exceedingly fortunate who can do ANY THING to a patient's nasal passages, and leave them in an improved condition. This remark will be appreciated by those who have had experience with these cases.

"MEDICAL JURISPRUDENCE IN DIVORCE."

BY CARL H. VON KLEIN, A.M., M.D., DAYTON, OHIO.

An address delivered (by invitation) before the "Ohio State Bar Association," at their annual meeting Dec. 30 and 31, 1884, Columbus, O.

MR. PRESIDENT, GENTLEMEN OF THE OHIO STATE BAR ASSOCIATION:

No branch of science seems to have been more neglected than that pertaining to Medical Jurisprudence in Divorce. Will you, then, pardon my zeal upon this subject? I do not desire to bring to your attention, gentlemen of the bar, a subject with which you are unacquainted, nor is it my object to send this address to the forensic world as upon a new field of science. But rather as an attempt to show what beneficial effects might result from a more thorough and scientific study of the subject. My humble judgment leads me to believe that many cases of divorce are obtained improperly from the very fact, known to laymen, as well as to your own and my profession, that the point of Medical Jurisprudence is very seldom raised. It may sound absurd, yet the fact can not be denied that two-thirds of the cases in divorce are obtained on the ground of willful absence. Though it may remain unadmitted, nevertheless I will assert, that in almost every case where willful absence is the alleged ground of divorce, if the predisposing cause were carefully ascertained, it would disclose the fact, that impotence or some organic perplexity, either local or constitutional was the prime cause. Yet have any of you ever heard of a court that inquired into the prime cause of a wife or husband's willful absence? Right here I would like to be informed of the truth of this matter, that it may enable me to place you aright before the eyes of the world. It would afford me great satisfaction to know that many of you who are very eminent in your profession can vindicate yourselves honorably from the charges which I am now about to make, to wit: a claim to superior wisdom and infallibility. It is a common thing for a lawyer to claim to be the most learned man in the land, from the very fact that he ought to be. The progressive scientific lawyer is demanded not only to be well posted in jurisprudence, but he must be no stranger to botany, chemistry, pharmacy, microscopy, physiology, anatomy, surgery, medicine, and its collaterals. His application must be indefatigable, and his attention to the operations of nature equal with that of a physician—a philosopher in the true sense of the term. It is not demanded of a physician to understand law, but it is emphatically required of the jurist to understand physic. I will again pray you to pardon my rude charges against your chosen profession, but it is the truth! "A very little truth will sometimes enlighten a vast extent of science." You may truthfully state that it is impossible for one human mind to accomplish all the branches of science especially demanded by your profession, but there is no excuse for you to ignore our profession. Since you cannot accomplish the entire science of your occupation without our aid, so essential to your assistance, you must, therefore, regard us a part of your profession. In order to prove that a physician is ignored by intelligent courts of judicature, I will show the following cases:

CASE 1. Mrs. B, an intelligent lady, age 26, a handsome brunette, applied for divorce to the County Court of Cook Co., Ill, in 1872, on the plea of willful absence. When the case was called, the defendant aimed to prove that it was a necessity for him to be parted from her, but he did not care to be divorced. But the court ignored this, and a divorce was granted. In 1874 she applied to a physician for treatment for some acute malady. After he became well acquainted with his patient, he discovered by her admission that she was once married, and loved her husband, but she had lost her sexual desire, and venereal intercourse had become almost as a death warrant. She did not even care about being restored, but after expostulating with her for some time, she consented to treatment. She was entirely restored in the course of nine months, when she again renewed her marriage with her former husband.

CASE 2. Mrs. L., age 22, applied to the County Court of Wayne County, Michigan, for a divorce on the same ground as in the former case. She related a peculiar history. She stated in her petition, after the second night of her marriage her husband left her bed in the middle of the night and had not returned for three years or longer, for a cause that she did not know. But she admitted in court that the fault was her own which caused him to leave her. She testified that she had a boil in the vaginal cavity, and that she could have no connection with him, and for refusing indulgence to his venereal pleasures, he left her. But she loved him and would do so to-day, and he would live with her, provided she could perform sexuality. Nevertheless a divorce was granted. A friend advised her to consult a physician, which was done, and she permitted an operation which restored her to her normal condition by removing three large polypi, each one weighing almost an ounce and a half. She also remarried.

CASE 3. Mrs. D, age 31, married nine years, applied for divorce in New York County Court, on the usual ground of willful absence. She claimed that her husband did not like her, and during all the period of their marriage there was no sexual intercourse between them; she claimed that she liked him and would live with him, if she could raise a family. The defendant also admitted there was no such intercourse between them; that he would live with her if he was able to accomplish the same. Here the greatest cir-

cumspection of medical jurisprudence should have been demanded, but neither the jurist nor the judge of such an enlightened court as New York, demanded or ascertained the incapacity of the unfortunate man, and a divorce was granted. In accordance with the plea of the plaintiff, in a short time after, he consulted a physician who found him to be afflicted with capistration; he was immediately relieved by a surgical operation. He went to see his former wife and they were remarried six months after the divorce, and are now living together happily with a family of two or three children.

There are thousands of cases of the same nature that are neglected by the ignorance of the faculty, the caprice of the court, or by the artifices of either or both. From the foregoing and the continuation it can and will be seen, that medical jurisprudence is necessary in almost every case of divorce, but no books in the world will ever make an expert to facilitate the learning of it. It should excite the most strenuous endeavor of those whose business it is to instruct others in the medical science, the utility of which has been confirmed by a long, extensive, and painful experience. Such as they are, mankind are welcome to them, for medical men have no other object in view but human benefit. He who can conceal that which would be advantageous to thousands for the emolument of a paltry individual, is a despicable wretch that deserves very ill of society.

"Si quid novisti rectius istis,
Candidus imperti; si non his utere mecum."
Horat.

There[1] are many disorders which are generally allowed to constitute the natural grounds for a divorce between two married persons, though particular laws are generally founded on local causes, and probably do not refer to their natural reasons; yet no others concern the medical portion. There are many disorders, by whatever name they may be called, all defects of the human constitution, which appear to constitute the natural reason for a divorce, generally those which are absolute impediments to procreation; these may be considered in accordance with the subject of generation, and may be classed technically under two heads, *impotence* in men and *sterility* in women, which is either positive or perpetual, or such as defies human art to remove. We consider absolute impotence in men when they are eunuchs, or are deprived of both testicles, as these are the receptacles of semen; without them no generation can be performed; or spadones, such as have the nerve or muscle leading to the parts of generation bruised so as to deprive them of all perception of a venereal appetite; or when the penis is perforated in such a manner that the semen can not be emitted with sufficient force. This rule is to be admitted with some limitation, as the theory of generation is not sufficiently established. Even when the penis is too short, by being amputated for disease; or when the penis is too thick; these cases may be respectively considered; when both testicles have become scirrhus, so as to be incurable, or the vesicula seminales have become scirrhus; or the semen is too watery, and will not admit of alteration, nevertheless, it is not an absolute cause, as it admits of a cure; when they are afflicted with capistration, or the preputium is so formed or fastened to the glans penis that it cannot be relieved by a surgical operation. All disorders which are impediments to procreation of children, and which are not caused by the organs of generation; such as are of a highly contagious nature, or create an unconquerable aversion, as the lues veneræ, melancholy, epilepsy, scurvy, scrofula, and a highly fœtid and disagreeable breath. Absolute sterility in a woman, disqualifying her to perform sexuality, will arise when the parts ordained for the organs of generation are such that they do not admit of relief without great jeopardy of life; when the vagina is too straight and narrow; on account of scirrhus tumors, etc., which may be impossible to remove; when the orifice in the uterus is entirely closed. This is not an absolute impediment, because it may be remedied by the hand of a surgeon.

When there is an ulcer in the uterus, which might have penetrated the rectum and bladder, even when oppressively afflicted with leucorrhœa or whites, great care and attention should be given before an absolute judgment is rendered, as this admits a cure; but if everything failed, the husband should also be examined carefully in regard to his own adequacy. There are many other causes of sterility, which are caused by obstructions or injuries in the organs of generation; but it is all darkness, and it would be inhuman to determine by any other method than by the inspection and careful examination of the parts by some scientific and honorable physician. There are, besides these, many other circumstances that may not render either sex absolutely impotent, yet may be considered defective. There are certain obstructions to the generative organs that in no way constitute reason for divorce. Ignoramuses may consider them as such, but the progressive physician will guard against such an error. The following occur in the male sex: Monorchides—such as have only one testicle. These are by no means incapacitated, as this secretion is only made in that organ, from which it is carried to the vesiculæ seminales, and there deposited for use, so that one testicle is as effectual as two; the secretion is always proportionate to the evacuation. Triorchides—those who have *three* testicles; spadones, where one testicle is injured. Chrysporchides are those whose testicles do not lie in the scrotum, but in the abdomen or in the groin; those who have præputium buttoned on the glans; those who labor under phymosis, or paraphymosis, a disorder where the præputium is brought over the glans penus or contraction of the prepuce behind the corona in such a way as to prevent its return over the glans, and cannot be retracted but by art; those whose penis is shorter or longer than natural, unless extremely so; those who are circumcised. This is an advantage rather than an impediment. Hermaphrodites, or Androgyni. Those are unfortunate living beings, sometimes capable of all the functions of society. Yet their situation should arouse our

[1] According to **Johanus Fredericus Faselii** in his work entitled "**Elementa Medicinæ Forensis**," **Geneva, 1792.**

pity, for they are not only deprived of common pleasures of mankind, but are subject to disorders, painful, uncomfortable, incommodious, constantly having desire when in society of either sex. A perfect hermaphrodite has distinguished marks of both sexes, with a power of enjoyment with each. An imperfect hermaphrodite may be classed according to the sex, into what are called Androgynus and Androgyna.

The former is the male, who has his own organs tolerably perfect, but has some division in the flesh above and below, or in the scrotum, which makes an appearance of the female pudendum. The penis may also be obliterated so as to give no exterior appearance of the male, but the general constitution of the body, whiskers, etc., confirm him to be of that sex.

The Androgyna is a woman who has the parts of generation nearly like another but, at the same time, the clitoris grows so large that it has the form of the male penis. This may be a very inconvenient disorder, as she is sometimes deprived of pleasures peculiar to her sex and suffers much from the disorders of the parts. From her mammary glands and imperfection of beard, however, she is distinguished from the male. As a rule such women are subject to robust and masculine constitutions. It is evident that those sexes are as completely marked as in other persons, and to all legal intents and purposes, they are men and women. Women are claimed to be incapacitated entirely, as the various disorders of anteversion and retroversion, anteflexion and retroflexion of the uterus may be only temporary, and may be remedied by art; when they have too large a clitoris or nymphæ, or when they are androgynæ or hermaphrodites, from various causes; where the pudendum is too large and wide; when they are irregular menstruants, or have received a rupture of the perineum, or the part between the fundament and pudendum, etc. I will not enter into further detail, as there are many other points which might be raised in jurisprudence; but, in conclusion to my foregoing, I shall narrate to you, as well as to my professional brethren, the improvements of this science. I am sure they can have no objection to my course. The love of truth is of equal importance in the reception of facts and in the formation of opinions, and it includes, also, a readiness to relinquish our own opinions when new facts or arguments are presented to us which are calculated to overthrow them. Let us inform ourselves with all the modern education of the present day. Lord Bacon says: "Knowledge is more beautiful than any apparel of words which can be put upon it." Let us investigate that which we have neglected, and acknowledge the errors, which we lamentably regret, and unite our attainments of science in whatever language we may use. In natural science there is but one language universally intelligible. The language of facts belongs to nature here, therefore I trust that the forbearance of the past will be gravitated by the future, and we can rest assured that the most excellent and refined felicity springs from the disinterested and varied endeavors to lessen the evils of life and add to the enjoyment of our fellow-citizens.

TREATMENT OF DIPHTHERIA.

BY JOHN M. BATTEN, M.D., PITTSBURGH, PA.

During the last few years my recoveries of cases of diphtheria that I have treated have been 80 per cent. The remedies I have usually prescribed were chlorate of potash and tincture of the chloride of iron internally, with liberal sustaining diet and large doses of whisky at stated intervals. The local treatment consisted of gargling, penciling, or spraying the throat with a saturated solution of chlorate of potash, but latterly I have used lime water instead of the solution of chlorate of potash, and found it quite a beneficial local remedy.

The physician, in order to be successful in the treatment of diphtheria, should see the patient at the commencement of the disease. The patient should be put immediately to bed in a large and well ventilated room, on the second or third floor. The temperature of the apartment should be about 65° F., the air of which should be kept moist by means of boiling water in a tea-kettle or other vessel, or by placing unslaked lime in a bucket over which boiling water may be poured. The patient should remain in bed till all danger of the sequelæ of the disease are past. All secretions of the mouth and throat should be expectorated or washed out, and the throat and mouth should be rinsed or sprayed frequently, either with cold water, a solution of chlorate of potash, or with lime water. If the mouth and throat are parched, small pieces of ice may be allowed to dissolve in the mouth; strong caustic solutions of any kind should not be used. All the local applications should be of a soothing, solvent, or antiseptic character.

If the exudation extends along the nasal tracts, they should be washed out with lime water or a solution of chlorate of potash by means of a nasal douche. When the exudation has disappeared from the throat, tincture of the chloride of iron in full doses may be administered three times a day, and sweet cider taken *ad libituu*. The latter remedies I think counteract any tendency to congestion of the kidneys and consequently albuminuria. If, by reason of swelling of the throat, paralysis of the muscles of the pharynx, or irritable stomach, the patient becomes unable to swallow, suitable remedies should be directed per rectum.

When the throat is much swollen, bags of ice may be applied to it, or, if more agreeable to the patient, hot fomenting poultices may be used instead of the ice. The diphtheritic membrane should be allowed to come away without forcibly dragging at it.

The temperature usually the first few days of the disease rises to 102° F., then it declines to normal or below it, when it may again rise above normal. It is when the temperature declines below normal that stimulants act so beneficially, and if not given at any other period of the disease they should be given then; but, as I have stated before, I give whiskey throughout the disease.

The so-called specific remedies are mercury, sul-

phide of potassium, bromine, and the balsam of copaiba and cubebs. I have had no experience with any of the above named remedies except mercury, and would not administer it only in a case of laryngo-tracheal diphtheria or the so-called pseudo-membranous croup. In a malignant case of pharyngeal diphtheria I certainly would not administer mercury, because I belive other remedies would give better results.

The general antiseptic remedies are the tincture of the chloride of iron, chlorate of potash, carbolic acid, and salicylic acid with its compounds. The value of iron and chlorate of potash I have already referred to. Dr. Mackenzie states that sulpho-carbolates as referred to by Sansom have proved beneficial in his hands only in secondary poisoning of diphtheria. Five grains of the sulpho-carbolate of soda in water may be given to a child of two years every three or four hours. Salicylic acid has been used by Fontheim, who highly recommends it. Salicylate of soda and potash have been found of doubtful efficacy in the treatment of diphtheria.

Of the local solvents, Steiner recommends particularly lime water. Sanne has recently suggested saccharate of lime. The solvents can be applied to the membrane by means of a spray apparatus or camel's hair pencil. Mackenzie states that lactic acid is a most reliable solvent, and that he applies it freely with a brush.

As local antiseptics, carbolic acid, permanganate of potash, chloronated soda, glycerine of borax, and hydrated chloral suitably diluted have been recommended. The antiseptics may be gargled or used by a spray apparatus. Varnishes act as antiseptics by excluding the air from the false membrane, and have been recommended and used by Dr. Mackenzie. They consist of gum benzoin, gum tolu, mastich and resin, either of which may be dissolved in rectified spirits of ether. He prefers ethereal solutions (1 to 5) and tolu as most pleasant, and lasts longest as a varnish. It is applied by a brush after the false membrane has been dried by blotting paper.

Until recently I believed that laryngo-tracheal diphtheria, and the so-called pseudo-membranous croup, were two separate and distinct diseases. I think now they are one and the same disease. To substantiate me in my opinion as to the unity of the so-called pseudo-membranous croup and diphtheritic croup, I refer you to an article written by Alex. Harris, M.D., page 330, Vol. 1, No. 11, JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. I have observed the so-called pseudo-membranous croup treated with emetics, and have witnessed the patient vomiting from the effect of these drugs, and never have I known a patient recover by this mode of treatment. Of course, if we have reason to believe the membrane in the larynx or trachea is loose, then a brisk emetic may remove the exudation, otherwise it will do harm.

In a few cases I have prescribed one grain of calomel every two hours, and my patients so treated recovered. Twelve years ago my attention was directed to the beneficial effect of this remedy in this disease. I was attending professionally a boy, five years old, suffering from so-called pseudo-membranous croup. I prescribed the regular routine of expectorants and emetics, and my patient grew worse, till I thought it a proper case for surgical treatment. An experienced and skilled surgeon was called to see the case with me, who gave it as his opinion that the case was a proper one for tracheotomy. It being late in the evening, and the parents of the patient not having consented to have the operation performed, we determined to postpone the operation till the following morning. A grain each of calomel and pulverized ipecac was directed to be given every two hours, and the inhalation of steam from lime. The following morning, I was notified my services were no longer required. The family, a short time after my dismissal from the case, called in an irregular, but the calomel powders, in the meantime, were administered according to directions. Shortly after the irregular saw the boy and had administered a few sugar pellets, the membrane was expectorated and the child recovered. The calomel did its work, and the irregular got the credit of curing the disease.

Recently I attended a boy, six years old, suffering from diphtheritic croup. I administered calomel in grain doses, every two hours, with inhalation of steam from lime. The patient recovered. Dr. Wm. Pepper has lately reported a like success in the treatment of a case of laryngo-tracheal diptheria with mercury.

A CASE OF VICARIOUS CATAMENIAL HÆMORRHAGE FROM THE GUMS, WITH RECESSION OF THE GINGEVAL MARGINS AND ALVEOLAR PROCESSES, THE RESULT OF AMENORRHŒA.

BY W. W. ALLPORT, M.D., CHICAGO, ILL.

[Read to the Section of Oral and Dental Surgery, of the American Medical Association, May, 1884.]

Miss K. W., aged 25 years, of tall, slender form and nervous temperament, has been under my professional care for the past twelve years. As a girl she enjoyed average good health; several years ago noticed a tumid condition of the margins of the gums, which were also detached from the necks of the teeth, and slightly receded, accompanied with a tendency to hæmorrhage on mastication, or when using the tooth-brush.

Upon a careful examination, could find no deposits of salivary calculus about the necks or roots of the teeth, nor could I discover any discharge of pus. Pressure, however, upon the congested portions of the gums, caused slight hæmorrhage. The case was treated at that time by free scarification of the gingeval margins, and astringent washes. The young lady has been seen at frequent intervals during the intervening years, and the same treatment substantially adopted, but with only temporary benefit.

I had noticed, however, that she was gradually losing her health, and rapidly falling into a nervous,

moody condition, and suspecting uterine trouble, therefore advised consultation with her family physician; but this advice had been neglected. In October, 1883, was again consulted regarding the condition of her teeth and gums; found them in very much the same condition as already described. But the recession had gradually progressed until the necks of the teeth were considerably exposed, and the teeth very slightly loose in their alveoli. The general appearance of the patient was decidedly anæmic, and she complained of the hands and feet being habitually cold, pain and weakness in the lower lumbar region, easily fatigued, and that once in six or seven weeks her gums would bleed constantly for from two to three days—the amount small, but still enough to tint the saliva. I found also, upon further questioning, that she was suffering—and had been for the past seven or eight years—from a uterine derangement, causing irregularity in the appearance of the catamenia.

The history of the uterine difficulty is as follows: Commenced menstruation at fourteen and a half years of age. At first, menses were free, and unattended with pain, but habitually delayed from two to four weeks. This condition continued for nearly five years, when, at the age of 20, a period of six months elapsed without any appearance of menstruation. Since that time the menstrual periods have been rather more delayed than formerly, with gradually decreasing flow and more general disturbance. As the period of menstruation would arrive, she would be troubled with the hæmorrhage from the gums, already mentioned (occasionally accompanied with nose-bleed), dull headache and increasing languor, these symptoms subsiding on the appearance of the menstrual flow. The case was therefore referred to the family physician, Dr. J. S. Hotchkiss, who found, upon examination, the following conditions: Vagina quite small; uterus in a retroverted position, with the cervix anteflexed; was unable to pass the sound into the cavity of the uterus on account of the sharp flexion of the cervix.

The treatment has resulted in correcting the uterine difficulty. During this treatment the Faradic current was used about the pelvis, and the patient prescribed iron and cod-liver oil. Improvement commenced after the first week of treatment, and continued steadily. The first and second menstruations occurring after the treatment was begun were delayed till the sixth week, but were free, and unattended by any general disturbance. At the third menstrual period there was a slight show at the fourth week, but it came more freely at its accustomed time, the begininng of the sixth week.

When last seen, a few weeks ago, the patient's appearance gave indications that her health was in every way greatly improved.

The hæmorrhage from the gums has not occurred since the reëstablishment of the menstrual flow; the gums have their normal color and attachments (except that they had not regained their normal position at the necks of the teeth).

The mouth is now in a healthy condition, and this result has been accomplished with no other treatment than that adopted by her family physician for the amenorrhœa.

DISCUSSIONS ON DR. ALLPORT'S PAPER.

Dr. Marshall.—I have recently had under treatment a case in some respects similar to the one reported by Dr. Allport.

The lady, Mrs. H., 32 years of age, was married eight years ago, and after two years gave birth to a son, since which she has been afflicted with a displacement—anteversion—in all probability the result of subinvolution.

At times this condition has so affected her general health as to confine her to the house for weeks and months at a time. At every menstrual period she was obliged to keep her bed for from three days to a week, on account of severe suffering.

Five years ago she first noticed an inflamed condition of the margins of the gums, and that they were receding from the necks of the teeth. Her dentist was consulted, and he removed a small amount of salivary calculus from about the necks of the teeth, and said that was all he could do for her, as the cause was hereditary.

In June of last year (1883), was consulted by the lady with regard to the condition of her mouth. She said the recession of the gums had steadily progressed, and on examination I found the gums receded to the extent of about one-eighth of an inch from the necks of the teeth, and quite uniformly about all the teeth in both jaws. I found but little salivary calculus in any part of the mouth, and what was discovered was upon the roots of the teeth, and completely covered by the gums. The gums were congested at the margins, and loosened from the roots of the teeth to the varying depth of a sixteenth to a fourth of an inch.

Pus was found under the gums in those locations where the tartar was present.

The teeth were not loose, nor sensitive to percussion, and there was no hæmorrhage except when using the tooth-brush. Upon further inquiry, I ascertained the fact of the uterine displacement, and the history of the case as above stated, and that she had lately commenced treatment for that affection.

I was of the opinion that there was some association between the uterine trouble and the condition of her mouth, for I could not find a sufficient local explanation to account for the manifestations in the oral cavity. I therefore removed the tartar (sanguinary calculus (?)), prescribed an astringent wash for the gums, and told her we would wait the results of the uterine treatment. I have seen the patient several times since her physician began the treatment, and have noticed a steady improvement in her general health; she says—March, 1884—the uterine displacement has been entirely overcome, and that menstruation is now normal. The oral conditions are much improved in every respect, the congestion of the gums has entirely disappeared, no pus is to be found about the necks of the teeth, and the margins of the gums are firmly attached, but still leaving the necks of the teeth exposed. This case, like that of Dr. Allport's, is interesting from the fact that the oral

affection was but an expression of a disease located in a remote organ.

Dr. Williams.—I have noticed the same conditions as those mentioned by Dr. Allport and by Dr. Marshall, and cases are not infrequent in which diseased conditions located in the reproductive organs find expression in the oral cavity. One marked case, with inflammation of the gums and discharge of pus about the necks of the teeth, occurred in a young woman married just a year, and whose mouth was in a normal condition just previous to marriage. It was evidently the result of excessive venery.

Dr. Stellwagen.—I have seen two cases of vicarious catamenial hæmorrhage from the gums and alveolus occurring after the extraction of a tooth.

One was a young lady troubled with a slight ulceration of the os uteri; treatment of the ulceration resulted in the cessation of the hæmorrhage.

Dr. Briggs moved that the discussion on the papers be now passed, and that Dr. Allport be given an opportunity to present the models of a peculiar case of irregularity, and the methods adopted for its treatment.

MEDICAL PROGRESS.

MATERIA MEDICA AND THERAPEUTICS.

Hypodermic Injection of Amyl Followed by Epileptiform Convulsions. — Dr. Sidney Ringer (*Journal of Mental Science*, *Practitioner*), has noticed the occasional action of the nitrite of amyl upon the heart, and the strange effect sometimes produced upon the nervous centres. He says: "I have seen one case where a woman immediately after a drop dose turned deadly pale, felt very giddy, and then became partially unconscious, remaining so for ten minutes." And again: "A delicate woman, after one-thirtieth of a drop, passed in a few moments into a trance-like state." In a case described by Dr. Strahan, a chronic maniac aged fifty-three had suffered for several days from severe lumbago; a ten-minim dose of a 10 per cent solution of nitrite of amyl in rectified spirit was injected hypodermically. "Immediately after the injection the pain disappeared. He got up from the bed, and at my request stooped and touched the floor with his fingers. In, as nearly as could be guessed, about a minute and a half, he suddenly became deadly pale and sank back upon the bed." Then his face, head (bald), and neck became congested, and he was strongly convulsed for about half a minute. The convulsion affected the face and arms strongly, the legs slightly. The teeth were ground, and the breathing was suspended. In a few minutes after coming out of this fit, he was attacked by a second one, during which the heart's action became very faint. He was made to inhale some chloroform, and the fits did not return. The lumbago entirely disappeared. This observation is interesting, as inhalations of nitrite of amyl have been recommended to check the recurrence of epileptic convulsions.

Antipyrin in Children's Diseases. As the result of numerous trials of this new anti-febrile substance on children at the Erlangen polyclinic, Professor Penzoldt (*Berliner Klinische Wochenschrift*, *Practitioner*) arrives at the following conclusions:

1. It is to be regarded as a very suitable means for diminishing the temperature in the febrile affections of children.

2. In proper doses it effects a diminution by several degrees during several hours.

3. The diminution of the pulse does not always correspond to that of the temperature.

4. Its influence upon the general condition of the patient is usually favorable.

5. Vomiting only sometimes attends its employment; but when this persists the antipyrin must be given in an enema.

6. The proper dose to begin with is as many decigrammes as the child is years old, repeated three times, at intervals of one hour. If this dose does not suffice for the production of a decided effect, then it must be increased decigramme by decigramme. In an enema we may give at a single dose from three to six times as many decigrammes as the child has years.

7. After long use of it the child's system sometimes gets accustomed to the remedy.

SURGERY.

Stretching the Intercostal Nerves.—Dr. L. von Lesser, (*Deutsche Med. Wochenschr.*, *Practitioner*) of Leipzig, has recently reported a somewhat remarkable case of intercostal neuralgia and of mastodynia treated successfully by stretching of several intercostal nerves. The patient, a woman, aged 61 years, and the mother of eight children, had suffered during seven years from a feeling of compression of the thorax, very severe paroxysms of darting pains along the intercostal spaces on both sides, but more intense on the right, and neuralgic attacks in the mammæ and nipples. Through the intensity of these paroxysms, which came on usually at night, she was prevented from sleeping, and her sufferings were so severe that she became very anxious that some operation should be performed which might give relief. Just below the ribs, on the right side, was a fatty tumor of the size of a plum; but this was soft and free from tenderness, and clearly not the cause of the neuralgia. On pressure over each of the much-atrophied mammary glands, a few drops of fluid, resembling milk, could be forced out through the nipple. This fluid, which was secreted more abundantly during the paroxysms of neuralgia, presented under the microscope an abundance of oil-globules of different sizes, and a few round cells, containing oil globules. As the neuralgic pains were much more severe on the right than on the left side, the operation was performed on the right intercostal nerves, from the fourth to the tenth. The incision was begun in the axillary line, and carried obliquely backwards and downwards, from the upper margin of the third rib to the lower margin of the tenth rib. The processes of the serratus magnus muscle having been divided, and the external inter-

costal muscles separated from the lower margins of the corresponding upper ribs, the seven intercostal nerves were exposed, and each forcibly stretched in a centripetal and a centrifugal direction. The patient made a very speedy recovery. From the date of the operation she was able to sleep soundly at night, and complained only of occasional slight "dragging pains" on the right side of the chest, and a feeling of compression over the lower intercostal spaces. Up to the time of her discharge, on the eleventh day after the date of the operation, there had not been any return either of the paroxysms of pain or of the mastodynia.

RAPID RECOVERY AFTER WOUND OF STOMACH AND PROTRUSION OF VISCERA.—A remarkable case of recovery, after severe abdominal injury, is reported in the *Gazetta degli Ospitali*, by Dr. Iginio Tansini. (*Lancet*). P. G., aged 46, a peasant of Lodi, was admitted into the local hospital on the 10th of August, in a state of drunkenness, with an extensive wound in the left hypochondriac region. Through it protruded the stomach, the transverse colon, and a large part of the great omentum. On the anterior surface of the stomach was a wound an inch and a quarter long, through which the lining of the mucous membrane bulged so as to fill it. That wound was closed with two fine catgut sutures. After cleaning the displaced viscera with cotton pledgets dipped in a 2½ per cent. solution of carbolic acid, reduction was attempted, but the tightness of the edges prevented it. As the wound reached upwards to the costal margin, it was extended an inch downwards, and the viscera replaced. The parietal wound was then found to measure three and a half inches. A considerable amount of blood having accumulated in the abdominal cavity, the toilette of the peritoneum was very carefully performed with carbolized gauze soaked in warm carbolized water. The first pledgets brought away blood, and others were introduced amongst the coils of intestine and into the pelvis, until they came away quite clean. After inserting a thick drainage-tube into the lower angle of the wound, this was closed with four deep and four superficial sutures of carbolized silk; a broad antiseptic dressing followed. Progress was uninterrupted; no fever supervened. In the first three days much bloody fluid was carried off by the drainage-tube, which was gradually shortened, and definitely removed the eighth day. On September 5, the twenty-sixth day after admission, the patient left the hospital perfectly cured.

INJECTIONS OF ETHER AND IODOFORM IN COLD ABSCESS.—Professor Verneuil (*Remede Thérapeutique Med. Times*) obtains a rapid cure in almost all his cases of cold abscess from diseased bone, or from conjestion, etc., by ethereal injections of iodoform, of the strength of one in twenty. The abscess is first emptied by means of Potain's aspirator, and then receives from 100 to 300 grammes of the iodoform solution. By not exceeding this quantity (*i. e.*, five to fifteen grammes of iodoform) no fear of accidents need be felt. The liquid penetrates into all the anfractuosities and diverticula of the abscess, the ether becoming absorbed or evaporated, and the antiseptic agent being deposited uniformly on the pyogenic membrane, the action of which it modifies. This simple means, so exempt from danger and so easy of application, has proved highly successful, very large abscesses having yielded to three or four injections.

OBSTETRICS AND GYNÆCOLOGY.

LOCAL APPLICATIONS IN INTRA-UTERINE DISEASE.—Dr. Lombe Atthill discusses this subject quite fully (*British Medical Journal*) in his introduction to a discussion in the Section of Obstetric Medicine of the British Medical Association. Speaking of oppositions encountered, he quotes from a writer in the Edinburgh *Medical Journal* in 1872, who, in reviewing his (Atthill's) first edition of Lectures on the Diseases Peculiar to Women, in which he advocated the treatment of a granular condition of the intra-uterine mucous membrane by the application to it of fuming nitric acid, said: "Patients thoroughly treated in this manner will certainly have no more menorrhagia; they may be glad if they have even a uterine cavity left." He first of all points out briefly what are the conditions which demand the direct application of medical agents to the intra-uterine surface. These may be briefly summed up thus: All affections of local origin giving rise to profuse menstruation, metrorrhagia, or uterine catarrh, or in which hyperæsthesia of the nerves distributed over the inner surface of the uterus exists. Polypi, or tumors capable of being surgically treated, are excluded; but certain forms of recurrent growths and of malignant diseases are to be included. By the term "of local origin" is meant all affections depending on an unhealthy condition of the uterine walls, and of the mucous membrane lining the cavity, or of that membrane alone.

In analyzing his cases, he finds that he employs carbolic acid in nearly 70 per cent., iodized phenol in about 15 per cent., and nitric acid in hardly more than 3 per cent.

Borax is a mild astringent, and may be employed with advantage in cases in which uterine catarrh continues, after the application of more energetic agents has removed the urgent symptoms. Dr. Atthill generally employs it in the form of a saturated solution in glycerine.

Iodine is, next to borax, the least active of these substances. This is probably due to the fact that the uterus seems to absorb very sparingly, if at all, any agents applied to its inner surface. They seem to be of value chiefly in proportion to their power of acting as a caustic.

Carbolic acid. When the mucous membrane of the cavity of the uterus is painted over with a solution of carbolic acid, pain, in the majority of cases, is complained of; but this dies away rapidly, unless there be some inflammatory action present, or the os internum be contracted. Indeed, in many cases carbolic acid relieves pain; and while the passage of the uterine sound through the os internum, or pressure of

its point against the fundus, causes pain, the passage of the probe, armed with cotton saturated with a strong solution of carbolic acid, causes much less, or none at all. Carbolic acid is a mild caustic, causing a superficial slough to form, which peels off in about twenty-four hours. Therefore, to produce a permanent effect it must be applied at short intervals of about three or four days, and its use continued for some weeks.

Iodized phenol, that is, pure iodine dissolved in carbolic acid by the aid of gentle heat, in the proportion of one part of iodine to three or four of carbolic acid, as introduced by Dr. Battey, of Georgia, is one of the best, and certainly in some cases the best of all these agents.

Nitric acid is the most active of all the agents we apply to the interior of the uterus. Nevertheless, it causes very little pain, and its direct effects pass off quickly, for it only makes a superficial slough, which peels off in a day or two; still it requires to be used with great care, and it is necessary to use special precautions to prevent its effects from extending beyond the intended limits. Thus, it should never be applied to the cavity of the uterus unless the cervical canal be protected by the introduction of a tube of vulcanite or platinum; otherwise, contraction of the cervical canal, and possibly closure of the os uteri, may follow.

Iodoform in the shape of slender crayons made up with gum, which can be passed through the cervical canal into the cavity of the uterus, has been recommended in the treatment of some forms of painful menstruation. Dr. Atthill has not found it to be of much benefit; it may be used with advantage where there is a fœtid discharge, as in some forms of chronic endometritis occurring in elderly women.

Nitrate of silver introduced by Simpson's silver uterine *porte-caustique* in ten-grain quantities, dissolves slowly, and cauterizes, in a superficial manner, the mucous membrane lining the cavity and cervical canal; this peels off in a few days, and is discharged, generally with the escape of some blood. Used in cases of menorrhagia depending on imperfect involution of the uterus, it often acts in a satisfactory manner, stimulating the uterus to contract, and rendering the mucous membrane much healthier; but it is a painful application, and sometimes gives rise to troublesome symptoms. It possesses one advantage, that it seldom has to be applied a second time.

But cases are met with in which the method of swabbing out the cavity is altogether insufficient, and in at least four distinct conditions it will be found necessary to adopt other means:

1. When the uterine mucous membrane is so vascular that the introduction of the probe is followed by hæmorrhage sufficiently profuse to neutralize the effect of the caustic or astringent agent carried up by it.

2. When (as when chronic endometritis exists in a very imperfectly involuted uterus) the cavity is of large size.

3. When hæmorrhage occurs as the result of vascular growths, which, if removed, are rapidly reproduced; and lastly:

4. When epithelioma affects the cavity of the uterus.

To illustrate these classes Dr. Atthill gives the details of cases in which he derived benefit from the injection through an intra-uterine syringe of drachm doses of iodized phenol, diluted to one-half strength with alcohol, and in some repeated weekly. He claims that this treatment obviates the necessity of dilating the uterus, in a certain number of cases in which we have good grounds for believing that uterine hæmorrhage depends for its origin on an unhealthy condition of the mucous membrane lining the cavity of the uterus, the result of imperfect involution, but it will not obviate that necessity when the diagnosis is doubtful; next, that it will prolong life for at least a considerable period, in cases where epithelioma attacks the interior of the uterus as a primary disease, in which the only alternative is the performance of Freund's operation; thirdly, that it is a valuable supplementary treatment in cases in which, after the removal of an intra-uterine growth, the hæmorrhage continues, the mucous membrane lining the whole of the cavity being in an unhealthy condition; and lastly, that, in many cases of uterine fibroid, it enables us to tide the patient over the danger, till, the climacteric period being reached, life becomes safe. To carry out this treatment safely, only two precautions are necessary; first, the cervical canal must be patulous, so as to admit with ease the entrance of the tube of the syringe, and to permit the free egress of the fluid back into the speculum, should the cavity be too small to contain it; and, secondly, that only a very small quantity must be injected at a time, and in order that an error in this respect be impossible, the syringe used should not be capable of holding more than a drachm of fluid. To sum up:

1. Carbolic acid, in the proportion of one part of spirit to two of the acid, is the safest and most generally useful of all the agents employed.

2. Carbolic acid should always be applied by means of a probe, round the point of which a layer of cotton is rolled, the cotton being carried up to the fundus at least twice on each occasion that the applications are made, which should be on every third or fourth day, till marked improvement takes place.

3. Carbolic acid should never be injected into the uterus except when combined with iodine, in the form known as iodized phenol.

4. In many cases, iodized phenol may with advantage be applied by means of a probe.

5. In cases in which metrorrhagia or profuse menstruation occurs, depending on an unhealthy condition of the intra-uterine mucous membrane, the cavity being dilated and the uterus enlarged, from half a drachm to a drachm of iodized phenol may be injected with great advantage.

6. In cases in which epithelioma attacks the mucous membrane of the cavity, the injection of iodized phenol promises better results than any other treatment.

7. The success likely to follow the injection of iodized phenol renders the dilatation of the uterus, the use of the curette, and the subsequent application

of fuming nitric acid, less frequently necessary than has been the case hitherto.

8. The injection of iodized phenol requires to be carried out with so much care, that it should never be injected except by means of a syringe which will not contain more than one drachm.

9. The use of the fuming nitric acid should be limited, as a rule, to those cases in which dilatation has been practiced, and it should always be applied through a tube, inserted into the cervix uteri for the purpose of protecting the sides of that canal from the action of the acid.

10. The pain produced by the application of any medical agent to the intra-uterine cavity does not bear any relation to the activity of that agent, but is due to one of two causes—either to hyperæsthesia, or to narrowness of the cervical canal, especially of the os internum

MEDICINE.

PICRIC ACID AS A TEST FOR ALBUMEN AND SUGAR IN THE URINE.—Dr. George Johnson gives in the *Lancet* a summary of the results of the trial of this test during the past two years. The objections to its use as an albumen test have been: first, that it gives with peptones a precipitate not distinguishable from albumen. But the peptonous precipitate, unlike the albuminous, is completely redissolved by heat much below the boiling point of water. Nothing can be easier than to separate peptones from albumen if they should be combined in the same urine. This may be done in two ways: 1st. The albumen having been coagulated by heat, the peptones, which are not affected by heat, may be separated by filtration. 2d. The mixed peptones and albumen having been precipitated by picric acid, the peptones are redissolved by boiling, and then separated by pouring the boiling liquid on a previously heated filter. The coagulated albumen will be left on the filter, while the picrate of peptones in the filtrate will be reprecipitated on cooling.

Second. It has been truely stated that picric acid gives with the vegetable alkaloids a precipitate like albumen; it is, however, completely redissolved below the boiling point of water. It is only when large doses of the vegetable alkaloids are introduced into the stomach, such as a five-grain dose of quinine, that enough escapes through the kidneys to give a precipitate with picric acid Cases may occur, such as those of poisoning by opium or its alkaloid, in which picric acid as a urinary test for morphine might be of practical value.

Third. It is a fact that picric acid, like nitric or any other acid, when added to urine, sometimes, though rarely, causes a turbidity from precipitated urates; this precipitate, however, unlike albumen, is at once and completely redissolved by heat.

Fourth. Picric acid is the only common test for albumen, except heat, which has no apparent effect on mucin. Picric acid with acetic or citric acid causes a mucin haziness in most, if not all, normal urines. One of the most conclusive proofs that picric acid does not coagulate mucin, is afforded by the following experiment: Add to an albuminous urine of normal acidity an equal volume of picric acid solution, then boil, so as to ensure the complete coagulation of the albumen, and filter. Add a few drops of acetic or citric acid solution to the clear filtrate, and the result will be, in a minute or two, the appearance of a slight, but perceptible, haze of mucin, which the combined influence of picric acid and heat had left in the solution, and so passable through the filter. Picric acid will not coagulate albumen in an highly alkaline and ammoniacal urine; then the safest method of procedure is to acidify with acetic or citric acid, filter, and add picric acid to the filtrate. The mucin coagulated by the acetic or citric acid will remain on the filter, while the albumen, if present, will pass through. The mucin of normal urine must not be confounded with the morbid *mucus* from an inflamed or catarrhal mucous membrane, which is allied chemically and microscopically to pus, and, like pus, contains albumen. Its presence renders the secretions visibly turbid, and the turbidity must be removed by filtration before the tests for albumen can be conveniently applied. The most delicate test for a minute trace of albumen is to allow the picric acid solution to *mix*, and not merely to come in contact, with about two inches of the upper part of a long column of urine in a test tube, and then to boil the top of the liquid. The more or less turbid upper layer contrasts with the clear urine below. The slight haziness caused by a mere trace of albumen is always increased by heat, while the turbidity caused by urates, etc., is completely removed by heat. If the urine before testing is rendered turbid by urates, these must be removed by heat before the picric acid is added, and if by mucus or other floating particles, the fluid must be cleared by filtration.

The ready method of qualitative albumen and sugar testing consists in adding to about a drachm of urine in a test tube, an equal volume of picric acid solution. This, when boiled, affords a certain indication of the presence or absence of albumen; then, whether albumen be present or not, add about half a drachm of liquor potassæ (P.B.), and boil for about half a minute. Any coagulated albumen that may be present is redissolved by the alkali, and the resulting color in a non-saccharine urine is claret red. If any red color is visible, there is less than two grains of sugar per ounce. A solution of glucose, in the proportion of two grains to the ounce, after boiling for a few seconds with picric acid and potash, appears quite black until it is diluted with water. The materials for bedside albumen and sugar testing may be carried in solid form in a pocket test case, the picric acid in powder and the potash in grain lumps.

THE PATHOLOGICAL APPEARANCES IN NEW-BORN CHILDREN OF DEATH BY ASPHYXIA, AND THEIR MEDICO-LEGAL SIGNIFICANCE.—Dr. Alfred Notiling gives (*Aerztliches Intelligenzblatt Medical Chronicle*) a report founded on post-mortem examinations of 178 children born at the ninth month, 138 between the seventh and ninth, and 142 fœtuses born alive be-

tween the fourth and seventh months. The writer describes the changes characteristic of asphyxia and those due to external violence of criminal or other intent.

The cases of death from asphyxia had the following special features: In all the serous membranes and in the different mucous membranes, blood extravasations were found in the greater number of cases, and almost without exception sub-pericardial and sub-pleural hæmorrhages were present. Extravasations were also often present in the spleen, kidneys, thymus gland, the connective tissue surrounding the pancreas, and under the scalp, epicranial aponeurosis and pericranium.

In the middle ear and nasal fossæ there was almost always a dark red discoloration of the mucous membrane, and in many cases also blood was exuded.

Hæmorrhages into the conjunctiva and retina, and in the form of small striations in the vocal cords, were of frequent occurrence.

Extravasations into the tissue of the lungs was very rare, and blood was never found in the alveoli or bronchi unless it had come from the nose of the child or from the genital passages of the mother through aspiratory efforts.

If death had not been brought about very rapidly, œdema of the lungs, larynx and nasal mucous membrane was found, and sometimes interstitial emphysema, the latter, however, not being uncommon even in case of rapid asphyxia.

In the bones and muscles there were no changes, except great fullness of the blood-vessels.

Dr. Notiling gives the following conclusions:

1. Large blood extravasations in the skin are always the result of external violence.

2. Effusions of blood in the muscles of the neck and in the course of the great vessels of the neck, point clearly to attempted strangulation.

3. Hæmorrhages between the liver and its capsule, and in the liver substance, are always the result of external violence.

4. Lesions of the peritoneal membrane, and rupture of the liver, spleen and kidneys, are due to violence. They may be caused by the firm grasp of a hand round the child's body, and are not uncommon after attempts at artificial respiration.

5. Hæmorrhages in the umbilical cord are very rarely caused during the act of birth, or during attempts at replacement in cases of prolapse of the cord. They are almost always due to violence of some form, especially to tearing the cord.

6. Thick circular blood extravasations on the head or other parts of the body may be due to either difficult labor or external violence.

7. Hæmorrhages in the lips, muscles of the tongue, palate, or gullet, should raise a suspicion of violence. This will be confirmed if slight wounds of the mucous membranes of the parts affected are found.

8. Swelling of the lips, if not accounted for by the position of the face, during parturition, must be considered a sign of the pressure of a hand on the child's mouth.

9. Hæmorrhage into the external auditory meatus and external ear was not observed in any of the cases. This is always due to external violence.

10. Ecchymoses in the muscles, unless the result of difficult labor, etc., are always due to violence.

11. If asphyxia is caused by immersing the child in some fluid medium or in dust, this will very frequently be found in the nose, mouth, throat, stomach, or lungs.

12. Blood in the trachea, bronchi, and alveoli is usually due to aspiration from the maternal passages or from the child's nose.

If ecchymoses in the muscles are due to operative interference, and not to criminal acts, we must remember that the presentation of the child will probably have been abnormal, and in this case the caput succedaneum will not be on the head, but on some other part of the body; therefore the presence of a caput succedaneum on the head, with signs of external violence, will make us suspect criminal interference.

CONDUCTION OF PHYSICAL SIGNS IN DISEASES OF THE LUNGS.—Dr. Markham Skerritt read a paper on this subject before the Medical Society of London. He said (*Lancet*) that it was universally recognized that the lung tissue acted as a conducting medium for physical signs in heart disease, but it was not so fully appreciated that the physical signs of lesions of the lungs themselves might be detected at a distance from their source. It might be stated (1) that physical signs due to disease of a limited portion of lung were liable to be conducted by the adjacent tissue so as to be recognized at a distance from the site of the lesion, as in front when the disease was at the back, or on the sound lung when one lung only was affected; (2) that it was therefore as important to trace to their origin the physical signs dependent upon lung disease, as it was to follow out those of a cardiac lesion. Instances were adduced of the adoption by a consolidated lung of the signs of pneumothorax derived from the opposite side; the transmission to the sound side of the tubular breathing of pneumonia, the interchange of physical signs between the affected side and the unaffected in pleuritic effusion, the conduction of the physical signs of phthisis from one apex to the other, and the conveyance throughout the pulmonary region of sounds having a strictly localized origin. The physical signs most liable to conduction were those of auscultation; and of these, chiefly râles and altered breathing. In the localization of a conducted sign in lung disease the process was the same as in the case of a cardiac lesion. In conduction a physical sign (1) retained its special quality; (2) lost in quantity in proportion to the distance from its source. The readiness with which a physical sign was conducted was also of value as an indication of the state of the transmitting tissue. The subject of the paper was one of considerable importance, as instances had been met with where error had resulted from a want of due appreciation of the facts adduced.

In the discussion which this paper elicited, Dr. Theodore Williams remembered several instances in which it had been difficult to arrive at a correct diagnosis, from physical signs being conducted away

from the place at which they originated. Dr. Kingston Fowler said it was very common to find that the physical signs of a cavity at one apex of the lungs were conducted to the opposite apex.

GASTRITIS FAVOSA: A NEW DISEASE.—At a meeting of the Vienna Imperial and Royal Society of Physicians, Professor Kundrat exhibited specimens of a unique kind (*Lancet*). The case was one of favus universalis, which had given rise to an abscess of the thigh, and had terminated fatally from severe gastro-intestinal disorder, marked by an uncontrollable diarrhœa. Numerous erosions, mingled with diphtheritic swellings, were found in the mucous membrane of the stomach, and the intestines contained some foul putrescent masses, and much mucus. Professor Kundrat at once declared the diphtheritic swellings to be due to the favus fungus, a view which was confirmed on microscopic examination. This is the first recorded instance in which the mucorineæ have been the cause of death, as it is the first of favus of the stomach and intestines. Indeed, the naked-eye appearance of the tumors in the stomach closely resembled the favus cups on the skin, and the fact that but little of the fungus was found in the intestine was explained by Professor Kaposi by their having undergone putrefaction in the bowel. The patient had previously been shown to the Society by Professor Kaposi as a rare instance of favus which covered the entire body, affecting even the fingernails (attributed to his habit of scratching himself constantly). Favus of the stomach is as unknown a condition in animals as it is in man; at any rate, Professor Croker, of the Vienna Hospital for Animals, stated that it never occurred in cats, although these animals frequently eat rats infested with the fungus. Professor Bamberger suggested that in this case the gastric mucosa was in an unhealthy condition at the time of infection, thereby affording a favorable nidus for the growth of the fungus. It must be borne in mind that the mucorineæ, unlike the schizomycetes, can thrive in acid liquids, and may therefore grow with impunity in the stomach. The case is of great importance, as showing that if they do gain access to the interior of the body, these fungi may be a source of danger and lead to a fatal result, thereby disproving the usually accepted notion of their harmless character.

ON THE SECRETION OF BILE.—Dr. Baldi has recently undertaken (*Lancet*) a series of experiments on the process of secretion of the bile, in the laboratory of M. Luciani, of Florence, in which he has endeavored to ascertain whether it takes place in a uniform manner in accordance with the presence or absence of food in the alimentary canal, and whether it varies materially with the nature of the food.

The results are given in the third volume of the *Archives Italiennes de Biologie*. A biliary fistula was first made, the ductus communis choledochus being ligatured so that no bile entered the duodenum. Dr. Baldi found that there was a singular irregularity in the quantity of the secretion formed, distinguishing the functions of the liver from all other digestive secreting organs. Not only was there great variation in the absolute quantity secreted, but the composition of the bile differed remarkably at different periods after a meal. Speaking broadly, in an animal that has been supplied with food, there is an augmentation in the total quantity of bile secreted in the course of some hours, as compared with the quantity secreted in the same time by the animal when fasting. It is not possible, however, to fix the time at which the secretion of bile after food is at its maximum; indeed, it is even possible that the maximum may be attained during some one hour when the animal is fasting.

Different kinds of foods, starches, proteids, fats, and mixed foods, have no appreciable effect on the quantity or quality of the bile. If we consider, in addition, that, unlike the other secretions which are poured into the intestinal tract, the bile continues to be secreted in prolonged fasting, as has been demonstrated by various experiments, we shall be led to the conclusion that this fluid, from a physiological point of view, has more analogy with urine than with the other digestive fluids. In a second series of researches, in which the effects of reputed cholagogue drugs were investigated, Dr. Baldi is not in accord with either Röhrig or with Rutherford. Röhrig found that colocynth was the most active cholagogue; then, in succession, jalap, aloes, senna, and rhubarb. Rutherford considered the order to be—podophyllin, rhubarb, aloes, colocynth, senna, and other drugs. Baldi experimented with podophyllin, rhubarb, jalap, sodium phosphate, pilocarpine, and Carlsbad water, and, from his results, feels inclined to doubt altogether the cholagogue value of all these substances. He admits, however, that the presence of a biliary fistula seriously interferes with the action of remedies. Dr. Baldi undertook still another series of experiments, to determine whether bile injected into the blood was excreted by the liver. The animal employed was the dog. The bile injected was that of the ox deprived of mucus. Dog bile is brown; ox bile green. Almost immediately after the injection of ox bile the color of the bile secreted by the dog became green.

RESORCIN IN THE TREATMENT OF POISONED WOUNDS.—Justus Audier relates a series of cases (*Monatshefte ür praktische Dermatologie, Edin. Med. Jour.*) where severe local inflammation, accompanied in some with lymphangitis, and general constitutional disturbance followed wounds on various parts of the body. Some of these were dissection wounds, others poisoned by the contamination of chemical agents. In all the instances narrated the inflammation subsided, and the pain and constitutional symptoms ceased within a few hours after the application of a resorcin-vaseline salve. The strength of this is only given in one case, equal parts of each; in the others the percentage of resorcin is said to have been high. That absorption of the resorcin took place was shown by the urine assuming a brownish green color. The details of the cases are given.

THE
Journal of American Medical Association.

PUBLISHED WEEKLY.

THE EDITOR of this JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information, should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

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Address

JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS

SATURDAY, FEBRUARY 7, 1885.

IS ABILITY to tolerate large doses of a medicine in any given disease without manifesting its ordinary effects, evidence that such medicine is of remedial value in the treatment of the disease?

We have been induced to ask this question by the frequent appearance of articles in medical journals, and of reported cases in papers read before medical societies, in which very large doses of known active medicinal agents have been given in certain acute general diseases without inducing any correspondingly exaggerated effects. And this apparent tolerance of the remedy has generally been mentioned as one of the evidences that it was specially indicated in the treatment of the disease. The most recent illustrations of this have been in reference to the use of alcohol in the form of whiskey or brandy, and of mercurials in the treatment of diphtheria. To the extravagant use of the latter, particularly in the form of calomel, we had occasion to allude in these columns; few months since. Since that time, however, there has appeared in this journal the paper on diphtheria read in the Section of Diseases of Children by Dr. Brown, with the discussion thereon a the report of cases of the disease treated with large doses of whisky in the proceedings of a recent meeting of the Chicago Medical Society; and the paper of Dr. Batten, in the present number, in which he speaks of giving it freely in all stages of the disease. Some of these writers, and several of those who took part in the discussions, mention the giving of from 130 c.c., to 260 cc., or four to eight ounces of whisky or brandy per day, generally mixed with milk and sugar, to children suffering with diphtheria between three and ten years of age, for several days in succession. It is well known that such quantities given to children of the same ages in health, generally produce, first, intoxication and then profound anæsthesia or unconsciousness; and in some instances on record, death has ensued. But the almost uniform testimony is, that in the cases of diphtheria, no symptoms of intoxication follow the administration of the alcohol, and this is alluded to as evidence that the remedy is both strongly indicated and well borne. Is this, however, a necessary or justifiable inference from the premises? Is tolerance of unusually large doses, or apparent insensibility to the ordinary effects of any remedy during the progress of an acute disease, proper evidence that such remedy is either indicated or acting beneficially? On the contrary, is it not rather strong proof that the morbid conditions present have so diminished or perverted the nervous sensibilities and molecular movements that the remedy is neither taken up with facility nor its presence responded to as in health; and consequently that it is not capable of acting as an efficient remedy while such morbid conditions continue?

It is hardly three decades of time since the same reasoning was applied to the use of opiates and anæsthetics in the treatment of tetanus, delirium tremens, etc. We were pointed to the very large quantities of those powerful agents that patients laboring under the diseases just named usually tolerated without marked effect, as evidence of the propriety of their use. And not a few were dosed so actively that when the morbid conditions began to decline, the quantity of medicine in the system speedily developed profound stupor and sometimes death. Such results are liable to occur from the indiscriminate administration of any active drug in large doses frequently repeated during the progress of all acute self-limited diseases. And nothing is easier than to deceive ourselves in regard to the benefits of medicine unless we carefully note all the circumstances connected with the natural history of the disease we may have under treatment. For instance, it is well known that diphtheria has its stage of development, during which the membranous exudation and tumefaction of the glands and tissues involved are increasing, which may last from two to four days; the stage of maturity, during which the exudation disintegrates, and the inflamed tissues begin to undergo resolution, ulceration, or gangrene, according to the grade of severity, which lasts from three to five days; and the stage of repair or convalescence

that may occupy from one to three weeks. It is easy to see that a physician coming to his patient near the end of the first stage for the first time (which is often the case) and prescribing some particular remedy, might find the next day a marked change for the better, indicated by less fever and loosening or disintegration of the membrane, and what more natural than to conclude that his remedies had produced the change when, in truth they had nothing to do with it, or might have been even injurious in other directions.

Again, it is known to all who have given attention to the subject, that diphtheria, like most other zymotic or acute infectious diseases, varies greatly in its severity in different seasons, and in different families and localities in the same season, and also pretty uniformly displays its highest degree of malignancy at the commencement of an epidemic outbreak.

In consequence of these natural differences the ratio of deaths vary greatly under precisely the same treatment, or without any medication whatever. Thus, thirty years since, at the beginning of one of the most extensive epidemics of diphtheria in this country, in a little town in New England, of the first fourteen cases thirteen died. Before the same general epidemic period was passed, during a well-marked prevalence of the disease in a neighborhood near Milwaukee, Dr. Wells reported 133 cases coming under his observation in one season, only four of whom died; and three of the four were in the first family attacked. If Dr. Wells had reported the first seven cases separately, as did Dr. Chandler at a recent meeting of the Chicago Medical Society, like the latter he would have had three deaths in the first seven cases, and only one in the remaining 126; and that without any use of whisky or brandy for any of them. Dr. Batten, whose article is in the present number of the JOURNAL, and who recommends the use of alcoholic remedies in all stages of the disease, claims 80 per cent of recoveries *i. e.* one death in every five cases, which is certainly a high ratio of mortality, for the disease as it usually occurs from year to year in any given community. We call attention to the foregoing sources of fallacy in estimating the effects of remedies because we are satisfied that the present popular tendency to use large doses of alcoholic remedies in diphtheria is productive of positive detriment to the patients.

ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—The official notice of the Permanent Secretary, for the thirty-sixth annual session of the National Association, to be held in New Orleans, La., commencing on Tuesday morning, April 28, 1885, will be found in the present number of this journal under the head of Miscellaneous Matters. Let all readers interested read the notice carefully, as it gives the ratio of representation by delegates from State and local medical societies; the officers of Sections; the by-laws relating to presentation of papers; and some proposed amendments to the constitution and by-laws.

As the great International Exposition will continue open until the 1st of June, and the railroad lines promise liberal reductions of fare over the more important routes to New Orleans, the circumstances are favorable for a full and important meeting.

ANOTHER UNIVERSITY OF PHILADELPHIA DIPLOMA HEARD FROM.—*The Australasian Med. Gazette*, Oct. 15, 1884, contains a letter from a writer who signs himself V. E. Herbert, M.D., who complains that the Medical Board of New South Wales has refused to register his diploma for the degree of Doctor of Medicine, granted by the University of Philadelphia, U. S., "this University being one whose degrees are recognized and well thought of in that country." The writer moreover declares himself to have been for twelve months an assistant surgeon in the American navy. He goes on to say: "I know full well that American diplomas are deservedly unpopular, because so many of them are obtained almost without study. But this was not my case." He also claims a license from the School of Medicine of New York. The editor, in his comments upon the letter, does not appear to have the slightest suspicion that there may be any irregularity in the character of the diploma itself.

THE ETIOLOGY OF THE OPHTHALMIA OF NEW-BORN INFANTS.—Zweifel (*Arch. für Gynack. Rev. Mensuelle des Maladies de l'Enfance,*) asks if the ophthalmia of new-born infants may be produced by the normal utero-vaginal discharge (lochiæ), by the secretion furnished from catarrhal inflammation of these parts (leucorrhœa), or by a specific infectious agent (blennorrhagia). Neisser has described a special diplococcus gonorrhœic which may be the microbe of blennorrhagia and which may be the cause of ophthalmia in the newly-born.

Zweifel has collected by the use of the pipette some of the lochiæ from the vaginæ of newly delivered women who were perfectly healthy, which under the microscope did not give any traces of the gonococcus and has inoculated this liquid into the conjunctivæ cul-de-sac of six new-born infants, but there followed no trace of inflammation or suppuration, and he arrives at the conclusion that, in order to have purulent ophthalmia in a new-born child there must be blennorrhagic inflammation of the genitals of the woman.

SOCIETY PROCEEDINGS.

CHICAGO GYNÆCOLOGICAL SOCIETY.

Regular meeting of the Chicago Gynæcological Society; Friday evening, January 16, 1885. The President, Dr. H. P. Merriman, in the chair.

Dr. E. C. Dudley read a paper on an interesting and unusual case of double ovariotomy. The specimens were subsequently exhibited.

The patient, 18 years old, unmarried, came to Mercy Hospital, about 18 months ago, to consult Dr. Dudley about marked abdominal enlargement. The diagnosis of monocystic tumor of the parovarium or broad ligament was made. The cyst was aspirated, and two gallons of fluid were removed. This fluid possessed the following characters: Sp. Gr., 1000.5; neutral reaction; limpid as water; odorless; colorless; on microscopical examination no morphological constituents were detected; on chemical examination certain mineral salts were found, but no albumen.

The patient experienced so much relief after aspiration, that she left the hospital with the impression she was permanently restored to health.

About three months ago she visited Dr. Dudley at his office. It was found the cyst was partially refilled. An operation was determined upon.

The preparatory treatment of the patient, — apart from tonics, the most nutritious of foods, frequent baths, and finally a Turkish bath immediately preceding the day of operation, — consisted in the exhibition of remedies, designed to increase the tonicity of the muscular coats of the intestines, and to expel all the gases. For this purpose the patient was given, two or three times daily, a mixture of columbo, rhubarb, and compound tincture of cardamom. In a case, operated upon early in the autumn, Dr. Dudley had experienced much difficulty in the management of the intestines, which were distended with gas. In this case, subjected to the preparatory treatment just detailed, absolutely no difficulty in that direction was encountered.

The *mons veneris* was shaved, the vagina irrigated immediately before operation.

The details of rigidly antiseptic surgery were observed with reference to the operating room, instruments, operator and assistants.

On October 29, Dr. Dudley, asisted by Dr. W. W. Jaggard, Dr. R. W. Bishop, and Dr. W. E. Casselberry, performed ovariotomy, and removed both ovaries and tubes, together with a large monocyst of the left broad ligament. The pedicle of the large cyst was very vascular and, after transfixion with the passage of the ligature around each half, the operator was compelled to ligature *en masse* below the point of transfixion. The pedicle was afterwards seared above the Baker-Brown clamp, with Paquelin's thermo-cautery. Ether was employed as the anæsthetic.

The patient reacted well. At noon, two hours after operation, temperature 100.7°; pulse 150: respiration 20. She complained of nausea. Evening temperature 100.8°; pulse 115; respiration 20. Nausea continues; no tympanites.

Oct. 30, morning, temperature 100.4°; pulse 112; respiration 20. Evening, temperature 101°; pulse 124; respiration 20. Throughout the day the patient moaned and tossed, complained of nausea, vomited incessantly. A peculiar, talkative delirium ensued. Morphia and atropine were given to suppress vomiting; discontinued the atropine, fearing its cerebral action. Hot water, as suggested by Mr. Keith, was tried, with hope of checking nausea and vomiting, without success. The deodorized tincture of opium was substituted for morphia. The talkative delirium, nausea and vomiting continued unabated. The patient retained only a little ice water at long intervals.

Oct. 31, morning, temperature 99.8°; pulse 110; respiration 20. Evening, temperature 99.8°; pulse 110; respiration 20. Nervous symptoms greatly exaggerated; nausea and vomiting unabated; pain in the abdomen, complained of at intervals. Cordeia was substituted for the other opiates. Small quantities of milk and lime water, at intervals, were exhibited. The patient remained in the same condition: talkative delirium, no sleep, nausea and vomiting, pain in the abdomen, at intervals; no tympanites.

Nov. 1, morning and evening, temperature 99.7°; pulse 106; respiration 20. Talkative delirium, nausea, vomiting of bile,—the "mouth-filling" of Mr. Keith,— abdominal pain; no tympanites. She commenced to menstruate, or, at least, blood began to escape from the vagina.

Nov. 2, morning, temperature 98.8°; pulse 114; respiration 18. Evening, temperature 98.6°; pulse 135; respiration 21. Nervous symptoms more distressing; nausea and vomiting continuing; patient becoming emaciated; face taking on a pinched, anxious expression. Valentine's beef juice exhibited; mustard to epigastrium; strychnia, in small doses; champagne; bisulphate of quinine, *per rectum*.

Nov. 3, morning, 8 A. M., temperature 101°; pulse 130. 10 A. M., temperature 101.2°; pulse 160. 10:30 A. M., temperature 101.6°; pulse 178. Persistence of wild, talkative delirium, nausea, vomiting, abdominal pain. The pulse, while very rapid, was not the feeble pulse of collapse.

In a consultation with Dr. W. H. Byford on the previous day, it was decided that the patient was dying of exhaustion. Dr. Byford was averse to reopening the abdominal incision.

Dr. Dudley had one case of peritonitis following perforation of the posterior uterine wall, in Mercy Hospital, that died of septic poisoning, although the temperature did not rise above 100°.

With the aid of Dr. R. W. Bishop, Dr. Dudley etherized the patient, removed four or five stitches from the lower end of the abdominal incision, and inspected the cavity of the abdomen. The peritoneum was injected; no lymph was noticed, no gas in the intestines. The pedicles were not covered with lymph. A disinfected sponge on a holder was passed into the cul-de-sac of Douglas; about one-half of a

fluid ounce of bloody serum was removed. This red stained fluid was odorless; it was not further examined. Feeling no good had been accomplished, the incision was reunited.

This operation was performed at 10:30 A. M. Temperature at 12 M. 101°, pulse 150; temperature at 2 P. M. 100°, pulse 144; temperature at 3 P. M. 100°, pulse 135; temperature at 7 P. M. 100°, pulse 140; jactitation, wild delirium, nausea and vomiting, pain in the region of the cœliac axis, no tympanites. Rectal alimentation.

Nov. 4, morning temperature 100°, pulse 135–150. Whisky, beef tea and milk at regular intervals; bisulphate of quinia *per rectum*; persistence of the symptoms before detailed. In the afternoon the tongue was dry, cracked, ready to bleed; decidedly less nausea and vomiting. The nurse was directed to give the patient an enema of soap and water, with extract of ox gall. One quart of this mixture was injected into the bowel. No evacuation of the contents of the rectum following, a tube was introduced, which was followed by that classical sign, the audible passage of flatus. Mr. Keith says that if the intestines have sufficient muscular energy to expel flatus, the prognosis becomes more favorable. It is probable a reversed peristalsis occurred, and the injection was entirely absorbed. One hour afterwards the tongue became moist.

Evening temperature 101°, pulse 135. Acting on the suggestion from the enema, one quart of strong beef tea was introduced into the bowel.

Nov. 5, patient evidently in better condition; temperature, morning and evening, 98–99°; pulse 120–130°. One quart of strong beef juice was exhibited *per rectum*, and carried well up into the bowel. About three-fourths of this quantity was retained. Slight nausea and vomiting. Bowels were moved spontaneously, with evacuation of a large quantity of dark, tarry, fœtid fæces. The sutures, originally inserted, were removed.

Nov. 6, morning, temperature 98.5°; pulse 90; evening, temperature 98.1°; pulse 115. Bowels were again moved spontaneously, with evacuation of dark, tarry, fœtid fæces. All the symptoms of the patient assuming a favorable character. Beef tea, whisky, quinine, and nutrient enemata continued. From this time on, the patient made an uninterrupted recovery. At the end of two weeks she was removed to St. Luke's Hospital. She is now in good health, and pursuing her usual avocation. In conclusion, Dr. Dudley called attention to the three following subjects, and requested that the discussion should be more particularly limited to their consideration:

1. *Preparatory Treatment of the Intestinal Tract.* Is it possible to render the intestines manageable during an operation in the abdominal cavity by any dietetic or medical agencies? The escape of the intestines without the abdominal parities was a very distressing complication. The shock of the operation was increased, large vascular areas were rapidly cooled, notwithstanding the fact that they might be enveloped in warm, disinfected fabrics. It was not always easy to return the intestines to the cavity of the abdomen, and even then, there was danger of strangulation. He was of the opinion that, in the case reported, the rhubarb, columbo and cardamom, were active in restoring tonicity to the muscular coats, and in the expulsion of flatus.

2. *The Retention of Enemata.* It was a matter of surprise to him that one quart of fluid exhibited *per rectum*, on three successive days, should be retained. He supposed that the liquid portions of the injections were absorbed at once, in consequence of the state of the tissues, resulting from exhaustion. The return of the tongue to a moist condition, within a very short space of time, immediately following the injection, was evidence in favor of this explanation.

3. *The Reopening of the Abdominal Incision.* Had it done any good? What produced the excessive nervousness? What was the cause of the nausea and vomiting?

The problem was an intricate one. It had been asserted that a very tight ligature around the pedicle can act as a reflex irritant. The sutures in the abdominal incision are sufficient, at times, to produce various obscure reflex symptoms. He had one case,—his first case,—in which uncontrollable vomiting yielded immediately upon the withdrawal of a rubber drainage-tube.

It may have been that the case reported was just on the eve of recovery when the abdomen was opened.

The fluid removed was small in quantity, and without odor. The peritonæum, however, can secrete with wonderful rapidity, and then absorb the secretion. He had not examined the fluid microscopically or chemically. He had dusted into the cul-de-sac a small quantity of iodoform. Whether *post hoc* or *propter hoc*, the patient recovered.

If it was a case of exhaustion, the beef, milk, and whiskey deserved the credit. If a case of sepsis, the reopening of the incision was the potent factor. In answer to a question by Dr. Sawyer, Dr. Dudley said that although the delirium of the patient was attended with visions of snakes, alcohol was out of the question, from his own knowledge of the habits of the patient. In answer to Dr. Merriman's question as to the preparation of the ligatures, Dr. Dudley said that silk thread was used exclusively for sutures and ligatures. This silk thread was boiled for ten minutes in 95 per cent sol. carbolic acid; then for thirty minutes in 5 per cent sol. carbolic acid; finally, it was deposited in a solution of the bichloride of mercury, 1 to 4,000.

Dr. Dudley then exhibited the specimens. The right ovary was slightly enlarged, and in the commencing stage of cystic degeneration. A cyst, about the size of a hickory-nut, was found in the right broad ligament. The left ovary was converted into a mass of fibrous tissue, about the size and shape of a kidney. Springing from the left parovarium or from the left broad ligament was the large monocyst, to which allusion has been made. This cyst, at the time of operation, contained about forty pounds of fluid.

DISCUSSION.

Dr. Henry T. Byford thought that the reopening of the abdominal incision was unnecessary. Relief

could not have come from the removal of such a small quantity of fluid as one-half fluid ounce. The improvement immediately following the operation was probably due to the stimulant effect of the ether. The delirium seemed to him to be that of alcohol or cerebral anæmia. He did not think that the symptoms of nausea and vomiting could be explained by any local irritant, such as ligatures, or sutures. It was a case of exhaustion, cured by the judicious exhibition of beef, whiskey and milk.

Dr. Edward Warren Sawyer said the patient owed her life to the persistent bravery of the operator and congratulated him upon his success. He was surprised to hear that no albumen was detected in the aspirated fluid. Friedrichs says albumen is always present in such cases, but absent in echinococcus cysts.

Dr. Flavius M. Wilder said that egg albumen in water was frequently tolerated by the stomach when other matters were rejected.

Dr. W. W. Jaggard thought the secretory and resorptive functions of the peritonæum were matters of positive knowledge. Dr. Anton Wölfler, in a recent paper, has taken substantially Dr. Dudley's position. It is quite possible that the one-half fluid ounce of blood serum, found in the cul-de-sac, represented the ultimate stage of resorption of a much larger quantity of fluid.

One-half fluid ounce of fluid, however, may contain enough sepsin or sufficient bacteria to produce the most fatal pyæmia. There is no quantitative relationship in regard to the virulency of certain poisons.

The mere reopening of the abdominal incision seems to act, under certain conditions, in a favorable manner. The reason is unknown. It is an empirical fact, acknowledged by a number of leading surgeons. He thought Dr. Dudley deserved great credit for his action in taking up the suggestions of numerous operators, when he knew positively no foreign body was contained within the abdominal cavity.

Dr. W. E. Casselberry wished to emphasize the importance of the preparatory treatment of the intestinal tract. He had been present at both of the operations to which Dr. Dudley had referred, and was struck by the difference in the behavior of the intestines. The mixture employed by Dr. Dudley resembled a favorite formula of the late Dr. Geo. B. Wood. This formula was advised for the expulsion of flatus, and restoration of tone to the intestinal muscular walls.

Dr. D. T. Nelson said it was highly important to avoid the use of opium when it was possible. The less opium, in general terms, the less tendency to vomiting. As to the pedicle, he entertained grave doubts as to the propriety of passing the ligature *en masse*. In strangulated hernia, uncontrollable vomiting frequently resulted from the inclusion of omentum in the ligature. Would it not be better to open the pedicle and pass a ligature around each vessel separately? He thought Bantock, Thornton and Spencer Wells advised the same treatment as in the securing of the vessels in an amputated leg.

Dr. Sawyer said he had seen Dr. John E. Owens remove a testicle; following the passage of the ligature around the cord, uncontrollable vomiting occurred.

The reopening of the abdominal incision was looked upon with too much fear. He had been present at an operation in which all the blood had not been removed from the cul-de-sac; the patient died of septicæmia. At the autopsy, Douglas's pouch was filled with blood; an operation might have saved life. Another case in point, was one of normal double ovariotomy. After the operation the patient sank rapidly. The operator concluded the patient was suffering from internal hæmorrhage. Twelve hours later the abdominal incision was reopened, and after two hours search the bleeding vessels were secured. The patient recovered.

Dr. H. P. Merriman endorsed Dr. Dudley's reopening of the abdominal incision in the case presented.

In regard to the preparatory treatment of the intestinal tract, he was not certain that the exhibition of columbo, rhubarb and cardamon, had produced the favorable result in the one case, nor that the neglect of preparatory treatment was operative in the troublesome condition in the other. He did not think the opium was the cause of vomiting, since the nausea disappeared while the patient was still under the influence of opiates. He did not think the ligature *en masse* or the clamp could be replaced by the methods suggested by Dr. Nelson. The danger from hæmorrhage was too great. It was an admirable subject for study. If the pedicle was completely destroyed, the danger of pinching nerve filaments would be less. The quantity of fluid removed after reopening the incision, was not sufficient to account for the improvement in symptoms.

Dr. Nelson referred to the compression forceps, and ligature placed above, as designed to obviate the inclusion of nerves still sensitive.

Dr. Dudley closed the discussion. The mere opening of the abdomen seemed to act in a remarkable manner under certain conditions. Tubercle of the peritonæum, papilloma of the omentum were pathological states. which had been influenced favorably by the procedure.

Cocculus Indicus is supposed to have the same effect as the mixture exhibited to prepare the intestinal tract.

It was not necessary that a discharge should have a foul odor or be large in quantity in order to be capable of producing pyæmia.

The Society adjourned to meet at the Palmer House, as the guests of Dr. Sawyer and Dr. Jaggard, on Friday evening, Feb. 20, 1885.

Dr. H. T. Byford will read a paper on "The Functions of the Membranes in Labor."

The inaugural thesis of Dr. Chas. Caldwell, on "Two Interesting Cases in Obstetrics," will be discussed.

W. W. JAGGARD, M.D., *Editor*.

2330 Indiana Ave., Jan. 19, 1885.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

LONDON, Jan. 7, 1885.

A most valuable and important report by the medical officer of the local government board has just been issued as a supplement to the report of the board itself. Dr. Buchanan records the increasing recognition which, under Sir Charles Dilke, the medical staff of the board receives, and says that quite 6,000 questions were referred to it in 1883. His report tells the year's history of vaccination work, of medical inquiries into epidemics, and the communication of diseases by milk; and with a glance at the cholera, passes on to the important scientific investigations made during the year into the chemistry of putrefaction, as well as into questions of infection and disinfection, and the organisms which produce disease. The anti-vaccinationists have not made much diminution in the use of the great prophylactic against small-pox. The latest returns are for 1881, but they show that only 3.8 per cent, or, including postponed cases, 4.5 per cent of the children whose births were registered in that year are unaccounted for as regards vaccination. Allowing for those who died during the period in which they may lawfully remain unvaccinated, the numbers vaccinated were twenty times those which remained unvaccinated. Yet, among the unvaccinated children the deaths from small-pox were ten times as numerous as they were among the twenty-fold larger number of vaccinated children. The rate of mortality from small-pox in the two classes was as 200 is to 1. Of the chances of the spread of cholera to England, Dr. Buchanan does not venture to express an opinion. He points out, however, that its presence in the Mediterranean is a much less formidable threat for England than an outbreak in the Baltic, though with the increased traffic between Asia and Europe this difference may be obliterated.

There are reports, too, on local outbreaks of disease which give evidence of the watchfulness of the local government board over the public health. If an outbreak occurs in a school, a village, or a town street, its origin is carefully traced, every circumstance connected with it is duly noted, and all the facts, with the practical inferences to be drawn from them, are set forth and acted upon. So complete a system for the staying of local epidemics has never before been set up in any part of the world. The progress made during the year in the use and application of disinfectants to disease is indicated in special and detailed reports by Dr. Burdon Sanderson, Dr. Klein and McDowdeswell. One of the most striking points in the report of the board for 1883–84 is the list of towns in which compulsory notification of infectious disease has been adopted. At the beginning of 1884 there were thirty-four towns, with an aggregate population of 2,653,565, in which it is the duty of the householder or of the medical attendant, or of both together, to notify the local authority of any case of infectious disease which occurs under their control. The power to require this notification is given to the municipal authorities by local acts, and was first acquired in 1877 by the corporation of Bolton. In the next year the corporations of Nottingham, Burton-on Trent, and Jarrow, received the same power. Every year since has added to the list, which comprises sixteen Lancashire towns. Last year the corporations of Brighton, Chester, Croydon and Shrewsbury have included the same provision in local acts, so that it now extends to 38 towns, and covers more than one-eighth of the total population outside of London. The system works well. It is administered by municipal corporations whose members and officials are personally known, and have the confidence of their constituencies. It by no means follows even in the most infectious cases, that removal follows notification. The local authority acts with due consideration for the feelings of families, and the precautions taken are as valuable for the home in which the outbreak has occurred as for the community. The success of the scheme depends entirely on the spirit in which it is carried out. In London no one would submit to the interference in his domestic concerns of parish officials, of whom he knew nothing and whose judgment and consideration he could not trust. This effective mode of checking the spread of infectious disease must therefore wait for its application to London till there is a municipality to apply it.

An event of great importance in the hospital world has taken place in the opening of the Miller Memorial Hospital at Greenwich, by the Lord Mayor. Its chief importance lies in its being the first hospital with circular wards in operation in the world. Every precaution has been taken in the selection of the medical and surgical staff to make it a good school for students to gain knowledge of their profession; it will thus act as a boon to many who now find the greatest difficulty in getting efficient training in the London hospitals on account of the great number of men attending them.

Dr. Price, the Welsh Druid, has again made himself conspicuous by his cremationist eccentricities. One night he cremated a bull thirteen years old, called Morgan Apis, to which the Druid was peculiarly attached. The proceedings lasted nine hours, and the field where the cremation was carried out was crowded with spectators. Dr. Price some years ago used to attend the annual meetings of the British Medical Association attired in a peculiar dress, supposed to represent the robes worn by the Druids at an early period of English history.

Mr. Morgan Hughes of the Westminster Hospital, calls attention to the value of cocaine in toothache. He used a 10 per cent solution of the hydrochlorate of cocaine in oil of cloves, applied freely by means of cotton wool, both to the pulp cavity and to the gums. Its application at once stopped the pain, and in extracting the tooth the patient did not feel the application of the forceps until the tooth left the socket. Mr. Hughes thinks dentists will find it useful in the preparation of cavities prior to filling them.

It is stated that there are seventeen quinine factories in the world, six in Germany, two in Italy,

three in France, two in England, and four in the United States. The annual total production of sulphate of quinine by these seventeen factories is said to be, as nearly as possible, 4,250,000 ounces.

Dr. Murray Lindsay, the Medical Superintendent of Mickliover Asylum near Derby, was attacked recently by one of the patients with a chisel. Three wounds were inflicted, one under the fifth rib being of a somewhat serious nature.

Last month an anti-vaccination demonstration of an extraordinary kind was made in London. An open hearse with a child's coffin, preceded by a band in a brake playing the dead march in "Saul," followed by a number of vehicles displaying placards, setting forth the object of the demonstrators, passed through the principal streets, attracting great attention.

It may not be generally known that the popular word "microbe" is said to have been coined by M. Charles Sedillot, of Strassburg, and that it was first used in a paper on M. Pasteur's discoveries before the French Academy of Science in 1878. In replying to M. Sedillot, M Pasteur used the word twice, after which it was generally adopted by scientific men. The *Medical Record*, however, doubts the accuracy of this statement, and says it was not M. Sedillot, in 1878, but Prof. Pacini who first used it, in 1854, while speaking of a micro-organism of cholera.

Sir Lyon Playfair will be the President of the British Association at Aberdeen in 1885. This selection of President has given the greatest satisfaction.

G. O. M.

PARIS LETTER.

PARIS, Jan. 9, 1885.

In his thesis for the doctorate, "On the Conditions for Surgical Intervention in the External Localizations of Tuberculosis," Dr. Coudray formulates certain rules which the surgeon might attend to with advantage to himself as well as to his patient. In a general way, the author states that external tuberculoses necessitate intervention only in such cases as do not present a spontaneous tendency to cure. The natural tendency to cure, which is frequent in a certain class of patients, constitutes, on the contrary, the exception with those who frequent the hospitals. The formation of secondary foci, consecutive to operations, may be considered a rare circumstance, if not exceptional. The doctrine of auto-inoculation, according to the same author, is no argument against intervention. The rule by which a tuberculous lesion should be removed as soon as it becomes a cause of wasting debility, is, according to Dr. Coudray, a dangerous one. It seems to him preferable to say that the lesion should be removed *before* it becomes a source of weakness. He admits, however, that the indications concerning the nature of the intervention sometimes present the greatest difficulty as regards tuberculous osteo-arthrites and certain other forms of osteitis. Dr. Coudray does not believe in the efficacy of partial operations, particularly near the joints; but, as he states, it is impossible to lay down even general rules on this point, as the surgeon must be guided by circumstances. The contra-indications of surgical interference reside in the predominance of the gravity of visceral lesions over the external localizations.

The JOURNAL of the 6th instant contains an editorial on, "*The Absence of Free Hydrochloric Acid in Stomachs Dilated from Carcinomatous Stenosis of the Pylorus.*" It may be interesting to give here an extract of a paper read before the Medical Society of Hospitals by Dr. Dujardin-Beaumetz, on the same subject. According to this physician, this sign is of little or no value as a means of diagnosis, as according to his experience he has found that in some cases of cancer of the stomach the gastric juice was acid whilst in other cases where there was no cancer the gastric juice was neutral. This of course was verified at the necropsy of the patients.

It is well known that certain physiologists, guided by the different results produced by electricity on the dead body and on living animals, have considered faradisation to be one of the best means for distinguishing real from apparent death. In a paper by Dr. Bochefontaine, which was communicated by Professor Richet to the Academy of Sciences, the author endeavors to overthrow this assertion, and advances the following proof in support of his views. He proposes the question: an animal being submitted to a faradic current in a limited region, in what conditions would the contact of the fingers with another part of the body produce a shock on the experimenter? Experiments practiced successively on living and on dead animals, have produced variable results, even in the course of the same experiment. The author therefore concludes that it would be imprudent to found, on such phenomena as these, a method of establishing the difference between real and apparent death, until some more scientific explanation can be given of this particularity.

The doctor was induced to try the above experiment, in order to find out some immediate sign of certain death, instead of having to wait for the setting in of putrefaction, which, up to now, is the only positive sign known by which certain death is distinguishable from apparent death, for during the late cholera epidemic several patients afflicted with the disease were found in that state, and it is to be feared that some were actually buried alive, as those dying from the disease were almost immediately interred, and this is not to be wondered at, as cholera patients have a cadaverous appearance. A case in point was reported to have occurred at Genoa, in the person of a Dr. Canepa, one of the leading physicians of that town. The report states that the doctor was seized with the cholera in the morning, and the disease ran its course so rapidly that in a few hours the patient seemed to have ceased to exist. The usual formalities for a funeral were gone through, but on bringing the coffin to his room, he presented himself at the door and inquired in a ghastly tone why he had been left for so long a time without his tea and rum. The undertaker and his men were so terrified that they at once disappeared. A doctor was immediately called in, and, in consultation with other physicians, practiced the hypodermic injection

of water saturated with chloride of sodium (hypodermoclysis, as the Italian physicians term the operation). This is simply an extension of Pacini's recommendation, practiced also by M. Duchaussoy, of Paris, and fully described in the "Report on the results of the different methods of treatment pursued in Epidemic Cholera, addressed to the President of the General Board of Health" (page 13, London: 1855). In this report Pacini says: "It is clear that the injection of salt water into the veins produces immediate reaction, but it is easy to see that the said reaction cannot be maintained so long as the intestinal transudation lasts. Every one will admit that the primary cure for a leaking wine barrel is not to keep filling it, but to make it tight; all the more is this the case in the human subject, where the vascular system has the power of refilling itself the moment the overflow ceases. So long as the patient is capable of swallowing astringent and antiseptic drinks, I do not believe the physician is authorized to practice those injections, since, besides being attended with risks, they are not absolutely required until the stage of apparent death; at least, in bodies presumed to be dead which present some return of warmth or some movement. The use of astringent and antiseptic beverages may be resorted to when reanimation manifests itself." The operation, however, of hypodermoclysis practiced on the patient above referred to, proved of no avail, as the unfortunate doctor died soon after; this time, for good. A. B.

DOMESTIC CORRESPONDENCE.

NEW YORK LETTER FROM OUR REGULAR CORRESPONDENT.

NEW YORK, Jan. 3, 1885.

The annual collections in aid of the various hospitals were made, as usual, on the last Saturday and Sunday of the year; but it will not be possible, for some time yet, to announce the amount contributed. This work is under the charge of the Hospital Saturday and Sunday Association, an organization created for this special purpose, and each year its managers endeavor to render the machinery of its operations more and more perfect, so that the collections may be made as systematically and the contributions secured may be as large as possible. During the autumn and early part of the winter an active canvass has been carried on among the various trades through the agency of auxiliary organizations; and the number of these auxiliaries, through the labors of the central organization, has continued to increase until it now includes nearly all the leading lines of trade and industry in the city. Among the churches a systematic effort last year resulted in securing contributions from 220 congregations, as against 100 the year before.

Some have supposed that the offerings made on Hospital Saturday and Sunday would be used as an excuse for reducing or discontinuing subscriptions toward the support of hospitals at other times, and that the total revenue raised for the support of these charitable institutions would therefore be diminished rather than increased in consequence of the work of the Association. It is gratifying to note, however, that the opposite of this has been the case. In addition to the sums collected through the instrumentality of the Association—aggregating nearly $120,000 in amount during the past three years—there has been during the same period an improvement in the income of the hospitals from other sources, indicating that Hospital Sunday has been a stimulant, rather than a detriment, to the general flow of hospital charity. The reports of the Associated Hospitals show that during the past three years $201,650 has been expended on the enlargement of accommodations; that there has been an increase of $9,780 in the income from invested funds; that there has been an increase of $43,036 in the amount received from paying patients (at the same time that the number of free patients has increased from 6,698, in 1881, to 8,509 in 1883), and that the increase of income from contributions towards current expenses, other than those made in connection with the annual Saturday and Sunday collections, amounts to $22,774.

From the last annual statement of the Association, we learn that twenty hospitals now derive their support in part through this channel. The cost of maintaining these institutions last year was $546,380. To meet this outlay there is a regular income to be absolutely depended upon (of invested funds), of only $114,227, while the amount received from paying patients aggregates $131,241. The total number of patients treated last year was 11,409. Of this number 3,872 were free patients, and it was principally to maintain this feature of the work of the hospitals, and, if possible, to increase its scope and efficiency, that the annual collection was instituted. That it has in a considerable degree fulfilled its purpose is conclusively demonstrated by a comparison of statements of different years, such as is given above. It is thus pointed out that an important source of revenue, on which these institucions have in the past depended is likely to fail them this year, and perhaps for the future altogether, amounting in the aggregate to $35,000. At the last session of the legislature an act was passed, the practical operation of which will be, it is said, to appropriate to other uses (the police pension fund), all the moneys hitherto given to eleemosynary institutions of the city of New York, from the funds contributed to the treasury through the board of excise. The Association therefore made an earnest appeal for increased gifts, in order that the hospitals might not be compelled, on account of diminished resources, to restrict their growing work of charity. Last year the Saturday and Sunday collection amounted to nearly $45,000, and this year, to make up for the loss of the excise money and enable these institutions to carry forward their work, on even its present scale, $75,000 would be required. In order to stimulate the clergy in securing contributions from their parishes, it was announced this year that any minister who made a collection in his congregation, should have the right to call upon the general agent of the Association, to visit and secure the

admission (if the case is a suitable one) to one of the hospitals of any sick person that he may recommend. The Association also announced that it would take care of the sick poor among the trades contributing to the fund.

In this connection it may be of interest to refer to some of the points of the observance of Hospital Day in London, as described in a recent letter to one of the New York newspapers. In 1884 one of the many accessories was a grand fête at the International Health Exhibition, South Kensington, from the proceeds of which the Prince of Wales, as treasurer, turned over to the hospital fund the sum of £4,000. "Of course," the letter goes on to say, "what interests royalty interests the nobility, and this interest happily does not end with a subscription or the lending of a proud name. What would New Yorkers say if, instead of seeing the collection boxes at the elevated railway stations fastened to a post, they should find them on tables in the most conspicuous places on the platforms, and each of them presided over by some fair leader of fashion? Yet this is one of the sights of Hospital Day in London, and was so the present year in spite of the fact that the day was as disagreeable as only a rainy day in London can be. For the purpose of street collection the city is divided into 22 districts, each under the control of a special committee. To these committees 1,400 tables, with boxes, were supplied, and as many ladies volunteered to take charge of them. No other fact could speak more eloquently of the general public interest than this." In addition to the 1,400 stands in charge of ladies, smaller collection boxes were furnished to large numbers of young girls, with silk badges and pictorial handbills, who went everywhere about the city soliciting contributions; while to the Sunday collection no less than 1,500 churches and 120 Sunday-schools contributed. As to the movement among the masses, 20,000 industrial and mercantile establishments received collection sheets, and the workingmen who actually contributed their mite through the various auxiliaries numbered fully 300,000. The good work was furthermore helped along by monster daylight and torchlight processions, accompanied by men carrying boxes and inviting donations, and by a number of grand ballad concerts, for which the leading talent of London volunteered its services.

In the report of the State Charities Aid Association, read at the annual meeting of the Association in December, a number of topics of interest are touched upon. The sub-committee on hospitals has prepared two plans, one for a village hospital, accompanied by an explanatory leaflet, the other for a model poor-house, and traced copies of these plans may be had on application at the office of the Association. An effort has been made by another sub-committee to establish cooled water fountains in crowded tenement house districts in the summer. Reports from the Metropolitan Drinking Fountain Association in England, it is said, show that these fountains supply a great want in large cities, diminishing sickness among children and intemperance. A special committee on the insane has prepared two pamphlets, one containing a summary of legislation in England and the condition of lunatics in Scotland, and the other on the training of nurses for the insane. This committee has received the coöperation of the Bellevue Training School for Nurses, and is now occupied in maturing a plan by which a number of women educated there as ordinary nurses for the sick may secure in one of the asylums of the city, a special training in the care of the insane. "It is hoped," says the report, "that out of this preliminary work may grow a training school for nurses for the insane, where graduates of all training schools may be received, and which shall be as far-reaching in its usefulness and as fruitful of good, as the Bellevue Training School has been."

By decision of the courts the health officers appointed under the general act for the preservation of the public health passed by the New York Legislature are State officers, and are therefore subject to the civil service rules. The Civil Service Commission has consequently adopted regulations as to the examination of such officers which require that the standing and fitness of applicants for the position shall be passed upon by a State Board of Examiners, consisting of five physicians to be designated by the commission, who, subject to the supervision of the latter, shall prepare the examination papers. After the completion of the examination, which is to be held under the supervision of the County Judge, the papers are to be transmitted by him to the commission at Albany.

Of the distinguished professor of anatomy at the University Medical School, Dr. William Darling, F.R.C.S., who died on Christmas morning, it is said that no one could quote a line of standard English poetry to him without his being able to recite the entire passage in which it occurred from memory. In regard to his own poetical gifts it is related that while he was living in London, a twisted paper was one day found in a young girl's skull among his specimens, containing an unsigned poem written by him, which was of such unusual beauty that a reward of fifty pounds was offered for the name of its author. His anatomical collection is one of the finest in this country, and Dr. Spitzka, who attended him in his last illness, and was one of his former pupils, asserts that the finding of a rare anomaly would delight the old man more than the discovery of the lost books of Tacitus would a German antiquarian.

P. B. P.

NEW YORK, Jan 24, 1884.

The annual meeting of the New York County Medical Association was held Jan. 19, when Dr. Charles A. Leale was elected President, Dr Edward G. Janeway Vice-President, and Dr. P. Byrnberg Porter Recording Secretary. On vacating the chair the retiring President, Dr. William Detmold, made some interesting remarks in which he spoke of the movement for the defense of the National Code, which resulted in the organization of the State and county associations, as one of the most significant and brilliant

events in the medical history of this country. He also alluded to the remarkable success which had been achieved by the Society during the first year of its existence, and to the permanent value of the papers read before it and the discussions upon them, and said that in a professional career which had now lasted over half a century there was nothing which he looked back upon with so much pride as the fact that he had been selected as the first President of the New York County Medical Association.

At the annual meeting of the New York Academy of Medicine, which occurred Jan. 15, Dr. Abraham Jacobi was elected President, Dr. Charles Carroll Lee Vice-President, and Dr. Louis Elsberg Corresponding Secretary. The report of the Library Committee showed that the library of the Academy now contains about 35,000 bound volumes and 9,000 pamphlets. During the past year there have been added to it 1,278 bound volumes, 1,875 pamphlets, and 7,814 medical journals. Five hundred dollars was appropriated for subscriptions to journals for the year 1885.

The paper of the evening, by Dr. W. Gill Wylie, one of the gynæcologists to Bellevue Hospital, was on "Diseases of the Fallopian Tubes and their Relation to Uterine Displacements and the use of Pessaries." In it he expressed the opinion that when the frequency and the great importance of diseases of the tubes is generally understood, the fascinating teaching of the mechanical pathologist, that most of the ills of women are due to uterine displacements, will fade to small proportions, and the relatively few lines now to be found in our text-books on salpingitis will increase rapidly; while there will not be so many hundred pages on cellulitis, displacements, and pessaries. He believes that salpingitis is nearly always caused by the extension of disease from the endometrium to the lining membrane of the tubes. The first effect of disease reaching a tube is to cause it to become engorged with blood. As it is loosely attached to the upper border of the broad ligament, it sinks lower in the pelvis, covering or folding over the ovary, and as the beginning of salpingitis, after labor or abortion, is often associated with an enlarged uterus, this organ sinks lower, while as the patient during the acute stage, is, as a rule, on her back, the fundus inclines backward. As soon as the discharge or the disease reaches the peritonæum, through the open end of the tube, the peritonæum becomes inflamed and lymph is thrown out, gluing the different organs together. As the acute stage subsides, the lymph contracts, bands of adhesion draw and distort the organs, and the folded, twisted and adherent broad ligament holds the uterus in its backward displacement. Repeated attacks are liable to occur, increasing the contractions and adhesions, and it is the rolled up ligaments and the tubes which fix the uterus backward; while it is the imbedded ovary and diseased tube in the hardened tissues of the broad ligament, which makes it next to impossible to insert a pessary and hold the uterus up without causing pain and running the risk of bursting or tearing a tube distended with septic or irritating fluid. When diseased tubes are plainly made out, and the patient is bedridden, or suffers to such an extent that after being clearly informed as to the effect and danger of the operation, she consents, Dr. Wylie considers complete removal of both tubes and ovaries, if both sides are affected, to be justifiable. He has now operated in fourteen cases, with the result of twelve recoveries and two deaths.

It will probably take a smaller mortality than that of one in seven to convince the mass of the profession that this operation is, as a rule, justifiable in the class of cases described by Dr. Wylie, where chronic invalidism is the worst that usually befalls the patient. It is true that in a few exceptional cases the bursting of a distended tube may result in general peritonitis, but even after peritonitis has set in the patients may sometimes be saved, as he himself points out, by a bold surgical interference. As a rule, therefore, it would seem to be better to defer the performance of laparotomy until after the occurrence of this possible accident. As regards ovarian cyst, the case is very different. Here the ordinary tendency of the disease is towards a fatal termination, and hence the operation would be entirely justifiable, even were the mortality vastly greater than it is. That Dr. Wylie was inclined to resort too frequently to laparotomy, seemed to be the general opinion of the speakers who took part in the discussion of the paper, among whom were such distinguished gynæcologists as Dr. Noeggerath, Dr. A. J. C. Skeene, of Brooklyn, and Dr. P. F. Mundé, editor of the *American Journal of Obstetrics*. Dr. Mundé spoke particularly of the great difficulty of diagnosis that was usually met with; but Dr. Wylie remarked in closing the discussion that since he had adopted his present plan of preparatory treatment he had found very little trouble in this respect. This consisted principally in applications for the purpose of softening the tissues, of glycerine and alum two or three times a week for a period of six weeks to six months, with an examination under ether at the end of that time in a considerable number of instances.

On the 18th of January, at the annual meeting of the Hospital Saturday and Sunday Association, it was reported that the collections for the hospitals this season had, up to that time, amounted to $30,988.90, and that the total, when all the money was handed in, would be at least $36,000. Last winter there was collected $43,062.74. It was stated that notwithstanding the business depression, the various trade auxiliary associations had done better than ever before; but that the churches had not contributed as liberally as last year, probably for the reason that on Hospital Sunday the weather was stormy.

Mr. Henry Lamb, of Rochester, N. Y., has offered through the American Public Health Association, the sum of $2,800 to be awarded in first prizes of $500 and second prizes of $200 for papers on the following subjects:

(1). Healthy homes and foods for the working classes.

(2). The sanitary conditions and necessities of school houses and school life.

(3). Disinfection and individual prophylaxis against infectious disease.

(4). The preventable causes of disease, injury, and death in American manufactories and workshops, and the best means and appliances for preventing and avoiding them.

All essays in competition for these prizes must be in the hands of the secretary, Dr. Irving A. Watson, of Concord, N. H., on or before October 15, 1885, and the awards will be announced at the next meeting of the Association, in the second week of December, at Washington.

Dr. Fordyce Barker, the family physician of Gen. Grant, is reported to have recently given the following account of his condition: "Gen. Grant's health has improved very much during the past few weeks, and the swelling in his mouth, which a few weeks ago made it difficult for him to talk or eat, has subsided in a great measure. Some eight or ten weeks ago he was suffering from a swelling, accompanied by great pain, in the back of the tongue, and I called in Dr. J. H. Douglas for the purpose of applying local treatment. The General's smoking, in which he had been accustomed to indulge all his life to excess, seemed to irritate the tongue, although he was not conscious of its affecting his general system. We therefore advised him to cut down his smoking to the first half of three cigars a day, as we thought it probable that it was the nicotine which accumulated in the last half of the cigar that produced the irritation. He followed this advice for perhaps a week, and then gave up smoking entirely, apparently without the least disturbance to his nervous system, loss of sleep, or other unpleasant effect whatever. This was remarkable, as he had been smoking from twelve to fifteen cigars a day. The improvement in his condition since then is marvelous. Under treatment by muriate of cocaine not only has the pain been greatly diminished, but the capillary congestion of the tissues has in a large measure disappeared." Dr. Douglas intimated that the trouble in the tongue was of an epitheliomatous character. P. B. P.

MALIGNANT PUSTULES.

SEDALIA, Mo., Jan. 20, 1885.

DEAR JOURNAL:—In your issue of 17th inst., I notice a communication from Dr. Leech, Jefferson Medical College, relating to ulcers of fingers. While I do not approve of charging everything of this nature to syphilitic virus, it would certainly appear that in the cases cited there must have been some specific poison, as the ophthalmitis of the infant would clearly show. The character of the ulceration, also, in my mind, would suggest animal poison. Our literature upon the subject of localized pustulations is fearfully meagre, so far as causation is concerned. Having just had a patient suffering in like manner, I was fearful of grave results. No cause could be attributed for the local trouble. I was treating the patient for a neurosis. The general health was good. The disease first manifested itself as a small blood-blister, about as large as a split pea, on the metacarpal phalange of the middle finger, right hand. The suppuration extended to the bone. The swelling involved the whole hand, and the general health was in consequence very much impaired. I have met with several instances of this kind within the last few years, and have suffered some three attacks myself, all on the right hand. These ulcers, to my mind, take on the form of braxy or malignant pustule, more than anything else. I will say, for the benefit of the doctor, that I now take the precaution to cauterize all abrasions about the hand before making digital examinations or having anything to do with surgical cases, and especially suppurating surfaces. Yours truly, JNO. W. TRADER.

RHINOLITH.

LOUISVILLE, KY.

My attention was called to the above subject by an article in a late medical journal. It recalled to my mind a case I had three years ago, in the person of a young gentleman 21 years of age, who had been suffering from nasal catarrh since quite young. Had been under the treatment, in the meantime, of many physicians for this affection. The young man was scrofulous in appearance. On making a careful examination of his nose, discovered well up in one nares a foreign body. It was easily reached by a pair of forceps and removed without difficulty, with some pain, followed by slight bleeding. The foreign body was about half an inch in diameter and flat; rather dish-shaped, or the shape of a large pearl button. The surface was rough like a mulberry. On sawing through the body it proved to be a rhinolith with an old-fashioned iron button, such as are used on the seats and backs of chairs and sofas, as a nucleus. The cross section presented very much the appearance of a renal calculus. Any history as to the length of time it had been there could not be gotten. He suffered no more from nasal catarrh after the removal of the rhinolith. W. H. CHEATHAM.

Lecturer on Diseases of Eye, Ear, Throat and Nose, University of Louisville.

BOOK REVIEWS.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, FOR THE YEAR 1884. Cloth, 521 pages with appendix.

A large part of the time of the Society was occupied in the discussion of the Code of Ethics. The following are quotations from the anniversary address, "The Reciprocal Attitude of the Medical Profession and the Community," by Alexander Hutchins, A.M., M.D.: "There is a medical science, but if medicine were a science only, there would be fewer medical schools than now exist." "The genius of true scholarship the wide world over, is the search for truth and its free gift to mankind." "Whether the time is ripe to hang a man on microscopic evidence, or whether the time will ever come when the special vibrio of the assassin shall be diagnosticated from

the spine of the burglar and the zoön of the concupiscent, are not questions angrily struggling for a reply." "The gifts of the degree are lavish. The restrictive barriers are so loosely set up, and the final tests of fitness so daintily applied, that the former are cast down as easily as the latter is overcome." "The end of all medical learning is to make sick people well, to assuage the discomforts of the incurable and to promote the euthanasia." "No man has an inalienable right to practice medicine. He can choose to do so, but the public may adjust the tests of his fitness." These quotations illustrate a few of the points considered in this eloquent and interesting address.

The body of the report is made up of twenty-five papers, any one of which is worthy of critical attention, but time or space will not permit a full review, and so we will print a few of the most striking if not the most important points.

Dr. Arpad G. Genter recommends Newber's methods of Canalization. Shallow canalization for draining cavities beneath large skin-flaps consists in punching elliptical holes about $^1/_4$ in. x $^3/_5$ in. through the most dependent part of the flap. Deep canalization as in wounds of the neck or axilla, consists in turning the skin-flaps into the bottom of the wound and securing them there by sutures. The success of both methods in obtaining immediate union are reported as good.

Dr. Edward H. Parker, as a result of observation and experience, estimates the cost of hospitals in small cities at $200 per bed.

Dr. A. Jacobi recommends arsenic and digitalis in phthisis. The former in doses of $^1/_{15}$ to $^1/_6$ gr. per day, apparently as an alterative, and the latter in sufficient amount to act as a cardiac stimulant. He has found arsenic particularly useful in the first stages of the disease. Dr. Drake in discussing the paper says that he has found it most useful in the latter stages. The reader is at liberty to draw his own conclusion; to us it would appear that the drug in the dose given, chiefly acted on the digestive apparatus and was thus applicable to this or any other disease in which general mal-nutrition is an important factor.

A New Method of Partial Extirpation of the Cancerous Uterus, by Dr. Ely Van De Warker. This consists of combined excision and cauterization with chloride of zinc.

Dr. John O. Roe makes extensive reports of cases of hay fever radically cured by the removal or destruction *in situ* of irritable portions of the nasal mucous membrane.

Dr. Geo. B. Fowler called the attention of the society to the dangers of poisoning by potassium chlorate.

Dr. David Little, in speaking on the prophylaxis of summer complaint of infants recommends that overfeeding be avoided. In illustration of the success of method he states: "For twenty-one years I have been physician to the Rochester Orphan Asylum. Each of these years had witnessed deaths from enteric disease until 1882. In the early summer of that year I said to the matron, 'Feed your babies but once in three hours during the day, but give them water to drink as often as they will take it.' The matron carried out the instructions to the letter as she understood them, and fed them three times a day. The following summer the original plan was carried out, the children being given a meal at night if water would not quiet them. There were but two deaths, and these were children who were accidentally kept at the bottle all night.

The Committee on Hygiene reported on the following subjects: Mortality Tables and Epidemic Influences, Dr. Janeway; Hygiene of the Ear, Dr. Pomeroy; Sewer Gases, Dr. Smith; High Houses, Dr. Vanderpoel.

Among others we note the deaths of George Burr, M.D., and John Foster Jenkins, A.M., M.D. C. E. W.

A HANDBOOK OF THE DISEASES OF THE EYE AND THEIR TREATMENT. By HENRY R. SWANZY, A.M., M.B., F.R.C.S.G. Cloth, 437 pages. Illustrated. New York: D. Appleton & Co.

This book is designed by the author as a handbook for the use of students of ophthalmology. It is condensed in style and broad in scope, covering all departments of the subject. Its chief use to the practitioner will be as a book of ready reference when memory fails him in some matter of diagnosis or treatment. The chapter on the eyelids treats of the various plastic operations for the relief of the distortions of these organs. In chapter xiv the motions of the pupil in health and disease are considered. Myosis may be caused by a diseased process irritating the pupil-contracting centre or fibres, or by one causing paralysis of the pupil-dilating centre or fibres, or by a combination of both. The reverse of this irritation or paralysis, or both, would give rise to mydriasis.

The following is a brief abstract from the portion of this chapter which refers to the value of the pupil in diagnosis:

Irritation myosis is found in: *a.* The early stages of inflammatory affections of the brain and its meninges. *b.* In cerebral apoplexy, thus differentiating from embolism. *c.* Inter-cranial tumors at the origin of the third nerve or in its course. *d.* At beginning of attack of hysteria or epilepsy. *e.* In tobacco amblyopia. *f.* As result of long maintained effort of accommodation, as in certain trades. *g.* As a reflex action in ciliary neurosis.

Paralytic myosis occurs in spinal lesions above the dorsal vertebræ, as in injuries and chronic forms of inflammation.

Irritation mydriasis occurs: *a.* In hyperæmia of the cervical portion of the spinal cord, and in spinal meningitis. *b.* In new growths in the cervical portion of the cord. *c.* In cases of tumors and other causes of high intercranial pressure. *d.* In spinal irritation of chlorosis or anæmia. *e.* In intestinal irritation from worms or other causes. *f.* In psychical excitement, may be unilateral.

Paralytic mydriasis may be due either to a paralysis of the pupil-contracting centre, or as the result of the stimulus not being conducted from the retinæ to that centre. The former may be found: *a.* Some-

times in progressive paralysis where at first there was myosis. *b.* In various diseased processes at the base of the brain affecting the third nerve. *c.* In a later stage of thrombosis of the cavernous sinus. *d.* In orbital pressure on the ciliary nerves. *e.* In glaucoma. *f.* In cases of intraocular tumors. In cases where the cause is simple failure in the transmission of the stimulus from the retina, contraction of the pupil will take place on convergence of the visual line.

In illustration of the test for color blindness there is appended to the book a sample card of the various worsteds used in the test. C. E. W.

LECTURES ON SOME IMPORTANT POINTS CONNECTED WITH THE SURGERY OF THE URINARY ORGANS. By SIR HENRY THOMPSON, F.R.C.S., M.B., Lond. Philadelphia: P. Blakiston & Son. Pp. 147.

This work is issued in the cheap students' form (cloth or paper) and is uniform with former volumes by the same writer. Included in this volume we find (Chap. III.) the essay on "Tumors of the Bladder," and digital exploration of that organ. This includes all that was found in the little book, "Tumors of the Bladder," with the exception of the colored plates, which were of slight importance.

The remainder of the chapters are supplementary to what he has repeatedly published. In the discussion of improved lithotrity full credit is given to American surgeons for modern improvements, but exception is taken to Bigelow's introduction of the word "litholopaxy" as unnecessary. The author asserts that the increased size of Bigelow's instruments is objectionable, while admitting that "Bigelow's achievement has been to demonstrate that crushing a stone, even if large, and removing all the fragments from the bladder at one sitting, is a safer proceeding than dividing the work between two, three or more sittings," p. 119.

In objecting to large lithotrites and evacuators, Sir Henry really shows that he has not yet thoroughly grasped the vital point in the American method, namely, the use of vastly larger and more powerful tubes and crushing instruments.

Bigelow's lithotrite compares with Thompson's in point of efficiency for *any* stone about as the rifled gun compares with the smooth-bore.

This instrument, however, fails to appear among the cuts given of "improved" lithotrites, p. 123–124, and even the one designated, "Fenestrated Lithotrite; very powerful" (Fig. 22), is far inferior to the new American instrument, for it lacks the long beak which is so useful in holding the membranes away from the jaws. This is ignorance or something worse — bigotry.

A man claiming the position of world-known specialist and authority, is bound to give more faithful information than this when he attempts to impart instruction. Clearly his business was to have known the fact that Bigelow's apparatus has completely superseded his own, and if he has not already purchased and tested the instruments he should do so at once.

On page 120 we find:

"We must recognize the importance of not inflicting any needless injury on the urethra and bladder, and should therefore always select the smallest lithotrites and evacuators which possess the strength and capability adequate to crush and remove the individual calculus to be dealt with."

Now, experience enough has been had on this side of the water to prove beyond cavil that the largest instruments are the ones which cause least injury even on very small or soft calculi, because, having once seized the stone, they annihilate it, often, with a single movement of the broad jaws, and thus with far less manipulation than in the smaller lithotrites. As to distending the urethra, *quid interest?* The urethra is not diseased. It is the inflamed and irritable bladder we wish to spare all possible contusion, and this we accomplish by using the largest possible instruments which the urethra will admit. Moreover, clinical experience has shown the use of Bigelow's large tubes and instruments to be harmless, all of which Sir Henry Thompson could have known, had he chosen to avail himself of the abundant facts now before the public. E. W. A.

TRANSACTIONS OF THE NEW HAMPSHIRE MEDICAL SOCIETY AT ITS NINETY-FOURTH ANNUAL SESSION, 1884. Paper, 213 pages.

From among the various interesting papers we abstract the following, from "Respiratory Irrigation in the Treatment of Empyema," by E. S. Berry, M.D. The author considers that the steps in the treatment of empyema are these: Aspiration; free drainage and frequent washing out of cavity; Listerism; suction to the compressed lung. The plan of treatment was suggested by C. McIvor Goyder, Esq., in the *Lancet* of March, 1881. The patient was a previously healthy boy, ten years of age. After three months' sickness, with fever and pain in side, etc., an opening was made in the sixth interspace on a line with the axilla. A tube was passed into the opening. This, after leaving the chest, passed through a rubber disc, about five inches in diameter, which fitted close to the chest-wall and held the tube in place. Over this a rubber bandage encircled the chest. This tube passed through the clothing and under a solution of salicylic acid, which was placed in the patient's pocket. Whenever the bottle was changed a stop-cock in the tube was closed. It will be seen, by a study of the physics of this apparatus, that while it is convenient and clean, it fully meets the indications for treatment above enumerated. The respiratory movements effect a circulation between the cavity of the chest and the bottle, while the vertical height of the fluid column in the tube determines the amount of suction on the lung. On raising the bottle the fluid will flow into the chest, and thus the cavity can be washed. In the case reported recovery was rapid.

C. E. W.

THE LAWS OF HEALTH. PHYSIOLOGY, HYGIENE, STIMULANTS, NARCOTICS. By JOSEPH C. HUTCHINSON, M.D., LL.D. Cloth, 223 pages. Illustrated.

This elementary work greatly resembles the other text-book by the same author which was noticed recently in this journal.

HISTORY OF THE DISCOVERY OF THE CIRCULATION OF THE BLOOD. By HENRY C. CHAPMAN, M.D. Philadelphia: P. Blakiston, Son & Co. Cloth, 56 pages; price $1.

The development of an idea is like the growth of the organism that produces it. It is neither spontaneous, instantaneous, nor in a continuous line of evolution. The first inception is in the observation of a fact. Through other observations and the elaboration of new thought it assumes its embryonic forms; at last the labor of some greater intellect delivers it from its enshrouding mysteries, and it becomes a self-sustaining, active power. In the work before us the author shows this to have been the case respecting the idea of the circulation of the blood.

He reviews the various fragmentary and incomplete notions of the ancient writers, and after showing that the work of Harvey was only incomplete in his ignorance of the capillary circulation, thus recapitulates the principal epochs:

"1. The structure and function of the valves of the heart. Erasistratus, B. C. 304.

"2. The arteries carry blood during life, not air. Galen, A. D. 165.

"3. The pulmonary circulation. Servetus, 1553.

"4. The systemic circulation. Cæsalpinus, 1593.

"5. The pulmonic and systemic circulation. Harvey, 1628.

"6. The capillaries. Malpighi, 1661."

C. E. W.

MISCELLANEOUS.

AMERICAN MEDICAL ASSOCIATION.

PHILADELPHIA, 1,400 PINE STREET, S. W. cor. Broad.

The THIRTY-SIXTH Annual Session will be held in New Orleans, La., on Tuesday, Wednesday, Thursday and Friday, April 28, 29, 30, and May 1, commencing on Tuesday, at 11 A. M.

"The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by *representation in their respective State Societies*, and from the Medical Department of the Army and Navy, and the Marine Hospital Service of the United States.

"Each State, County, and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number: *Provided*, however, that the number of delegates for any particular State, territory, county, city or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

☞ Secretaries of Medical Societies as above designated are earnestly requested to forward, *at once*, lists of their delegates.

☞ Also, that the Permanent Secretary may be enabled to erase from the roll, the names of those who have forfeited their membership, the Secretaries *are, by special resolution*, requested to send to him annually a corrected list of the membership of their respective societies.

SECTIONS.—"The Chairmen of the several Sections shall prepare and read, in the general sessions of the Association, papers on the advances and discoveries of the past year in the branches of science included in their respective Sections. * * *." *By-Laws*, Art. II, Sec. 4.

Practice of Medicine, Materia Medica and Physiology:—Dr. H. D. Didama, Syracuse, N. Y., Chairman; Dr. G. M. Garland, Boston, Mass., Secretary.

Obstetrics and Diseases of Women and Children:—Dr. R. S. Sutton, Pittsburg, Pa., Chairman; Dr. J.T. Jelks, Little Rock, Ark., Secretary.

Surgery and Anatomy:—Dr. Duncan Eve, Nashville, Tenn., Chairman; Dr. C. B. King, Allegheny, Pa., Secretary.

State Medicine:—Dr. E. W. Schauffler, St. Louis, Mo., Chairman; Dr. J. N. McCormack, Bowling Green, Ky., Secretary.

Ophthalmology, Otology and Laryngology:—Dr. J. A. White, Richmond, Va., Chairman; Dr. Eugene Smith, Detroit, Mich., Secretary.

Diseases of Children:—Dr. J. H. Pope, Marshall, Texas, Chairman; Dr. S. S. Adams, Washington, D. C., Secretary.

Oral and Dental Surgery:—Dr. W. W. Allport, Chicago, Ill., Chairman; Dr. E. C. Briggs, Boston, Mass., Secretary.

☞ A member desiring to read a paper before the Section should forward the paper, or its *title* and *length* (not to exceed twenty minutes in reading), to the Chairman of the Committee of Arrangements at least one month before the meeting.—*By-Laws*.

Committee of Arrangements:—Dr. Samuel D. Logan, New Orleans, La., Chairman.

Amendments to the Constitution, by Dr. C. H. Von Klein, Ohio: 1. No person who shall hereafter graduate from a medical college where literary education is not a prerequisite to such graduation, shall be eligible to be a delegate to the American Medical Association.

2. All delegates to this Association, as a part of their credentials, shall present certificates from the County, District or State Associations they represent, showing from what medical college and when graduated, but this provision shall not apply to delegates from the Army and Navy.

Amendments to By-Laws, by Dr. Foster Pratt, Mich.: Each Section shall nominate its Chairman and Secretary—all other nominations to be made as now, by the nominating committee.

By Dr. Carl Seiler, Penna.: Divide the Section on Ophthalmology, etc., and form two, one consisting of Ophthalmology alone, and one consisting of Otology, Laryngology and Rhinology.

WM. B. ATKINSON, M.D.
Permanent Secretary.